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THE CHANGING THEORY OF PROPERTY TAXATION

This paper puts forward, on the basis of some recent historical research, the following hypothesis.

Contrary to the general idea of more or less chronic confusion in the theory of property taxation, we have had three fairly distinct periods of property tax theory in the United States. In the earlier period property taxation rested avowedly on the ability theory. Toward the middle of the past century, the expansion of the social activities of government precipitated a sharp conflict, in the course of which opponents of these newer activities, representing largely property holding classes, fell back in self-defense upon the benefit principle of taxation. The traditional political philosophy of the courts made them particularly susceptible to this point of view. The result was a remarkable emphasis upon the benefit principle throughout the latter half of the century, which, in medical language, represented the "resistance" of a property holding democracy to the expanding concept of the social responsibilities of government.

With the passing of this somewhat unique phase, the common thought at the present time is that property taxation rests essentially on the ability basis, notwithstanding the frequent "breakdown" and "collapse" of the ability theory at the hands of recent writers.

Tax theory is commonly held to be subordinate to administrative and practical considerations, and perhaps properly so. Although, if we are speaking of actual practice, we might as well tell the whole truth and concede that tax administration likewise is commonly subordinate to politics. The writer is inclined to hold that in the long run tax theory is more powerful than either administration or politics, and that tax theories have, as a matter of fact, exerted a significant influence upon the development of actual tax systems in the United States. The tax theories embodied in the "uniformity" clauses of the middle of the past century have materially shaped the development of state tax systems since that time; a particular type of tariff theory has certainly shaped our tariff policy; and it was the tax theories of the Granger and Populist movements that forced the adoption of our federal income and inheritance taxes. Durant observes in his *Story of Philosophy* that in modern times "economic theories can overturn governments." We know of no tax theory at the present time that seems likely to overthrow any government, but after all even tax theory is young yet.

It seems particularly ironical that in the field of property taxation—the largest single source of governmental revenue in the United States—our concepts of theoretical principles should be conspicuously vague and con-

fused. Many tax students at the present time hold that the property tax is based on the "ability" principle; but other authorities of equal weight contend that it rests on the "benefit" principle; and probably the majority of both students and administrators believe it is based on no principle but that of availability and practical necessity.

We have no inclination to arbitrate these differences of opinion. But some extensive reading of property tax cases in the courts—for a purpose entirely unconnected with the subject of this paper—has suggested, by way of by-product, a hypothesis that seems to throw some light on the changing theory of property taxation.

We say *changing* theory because it appears to have been not so much a matter of confusion of theory as of definite changes in theory from time to time. In short, there seem to have been three fairly definite "periods" of property tax theory in this country.

1. *The Ability Theory*

Without going too far back into antiquity, it may be said that property taxes in some form or other have existed from the earliest times; and that so far as they were related to any principle in more primitive times it was to that of relative ability to contribute. In earlier times, as a matter of fact, no such thing as the "Benefit Theory" existed. It could not well exist, when governments themselves did not exist for the welfare of their peoples; when the ordinary individual anticipated no benefits from his government and was happy if only he were unmolested by it. Taxpayers of more recent times have sometimes been inclined to take a similar point of view.

The concept of public contribution according to ability was, however, advanced by Greek and Roman writers; in medieval times the idea of justice in the distribution of taxes emerged still more clearly; and with the rise of modern constitutional governments in Europe, the concept of ability as a criterion of justice was definitely enunciated. Cannan, for example, speaking of local taxes in England, observes:

It seems to be quite clear that in the Fourteenth and Fifteenth Century the accepted view was that each inhabitant should pay according to his ability or substance, for in those days ability and substance meant much the same thing: the man who has a large income without having a large capital is a product of modern civilization.¹

When property taxes were adopted by the American colonies, conditions were still similar in many respects to those of the fourteenth and fifteenth centuries, described by Professor Cannan. "Ability and substance" still meant much the same thing; and taxes were deliberately levied on the principle of taxing everyone "according to his estate and with con-

¹ Edwin Cannan, *History of Local Rates in England*, 2nd ed., p. 23.

sideration to all other his abilities whatsoever."² It is true that these sundry "abilities whatsoever" included at various times income, wages and earnings of occupations, and other things. But the significant thing from the standpoint of our inquiry is that property taxes were included among the group of taxes that rested upon "consideration" of ability.

Throughout the later colonial periods and the early period of the national government it is difficult to find evidence of any other principle in the minds of legislators and taxpayers. Even throughout the uniformity agitation in the middle of the past century, when taxation was an intensely acrimonious issue, and when the records of party platforms, public resolutions, and legislative debates are particularly abundant, discussion still turned upon the relative ability of different groups to pay taxes. The general argument for the taxation of railroads, for example, was not that they benefited as much as other classes—that was obvious in a period of liberal land grants and wholesale government subsidies—but that the railroads were as able to pay taxes, as the "working farmers" and other classes. It seems clear therefore that throughout the early period of its development in this country, property taxation was conceived in the minds both of legislators and taxpayers as resting definitely on the principle of ability.

II. The Benefit Principle

As a matter of fact, there is no evidence that the ability theory was ever abandoned on the part of large sections of public opinion in this country. The widespread movement for federal income and inheritance taxation in the last quarter of the past century affords evidence of its vitality throughout that period. But toward the middle of the century there was a remarkable resurgence of benefit theory and a surprising recognition of its pertinence and validity on the part of the courts.

Considerable caution is necessary, however, in interpreting judicial references to "benefit," because both the English and American courts had been accustomed to speak of benefit as the *justification* for taxation in general. Citizens were properly subject to taxation because of the benefits they received from government—regardless how the particular taxes might happen to be apportioned. This was a matter of general political philosophy, not a statement of the benefit theory of taxation, which means the apportionment of taxes *in proportion* to the benefits conferred on the taxpayer.

Furthermore there were some particular circumstances of the times which would have precipitated questions of benefit more sharply than before, regardless of any change of theory. One of these was the spectacular growth of cities and towns and the rapid development of the field of

² Ordinance of Massachusetts Bay Colony, 1634.

special assessments in the process of financing the construction of streets and other municipal utilities. But while the courts had some difficulty in drawing the line between the proper objects of general taxation on the one hand, and of special assessments on the other, nevertheless it is comparatively easy to distinguish the cases which involved this type of special benefit. Another such circumstance was the popularity of local improvements carried on at public expense and the growing practice of creating special "districts" for financing and constructing these improvements. These cases are somewhat more complicated than the special assessment cases above (sometimes involving special assessments as well as jurisdictional and other questions), but on the whole it is not difficult to distinguish them from cases involving the issue of general taxation.

Considerable allowance must be made also for the oratory to which the courts, especially in the southern and western states, were formerly prone. Some of their ponderous discussions of the proper principles of taxation should probably be put down as "legislative debate" rather than judicial pronouncements, although this in no way lessens their significance for the purpose of our present inquiry.

And finally, it is not meant to imply that the question of benefit in taxation had not been raised prior to the period we are discussing. In some of the eastern states it had been raised, and more or less disposed of, before its resurgence in the middle and western states in the period under consideration. In a quaint and curious case in the Massachusetts Supreme Court in 1820, cited in scores of instances thereafter, the Amesbury Nail Factory protested against payment of the parochial taxes, for the support both of religious teaching and secular instruction, on the ground that corporations, having no souls and being therefore incapable of salvation, "cannot possibly derive any benefit, in their political capacity, from the instructions or ministrations of those teachers." The court held that they did benefit in the fact that "property is made more secure by the . . . religious and moral instruction of adults." In this way every property owner "receives a compensation."³

But notwithstanding all these cautions and qualifications, one cannot but be impressed with the extent to which the issue of benefit was raised, and frequently approved by the courts, as the proper principle of taxation in the period from the middle of the century on. In 1851, for example, we find the New York Court of Appeals asserting:

A property tax for the general purpose of the government . . . is regarded as a just and equitable tax. *The reason is obvious.* It apportions the burthen according to benefit more nearly than any other inflexible rule of general taxation. A rich man derives more benefit from taxation, in the protection and improvement of his property, than a poor man, and ought therefore to pay more.⁴

³ Amesbury Nail Factory v. Weed, 17 Mass. 52.

⁴ People v. Mayor, 4 Comstock (N.Y.) 419, 428. Italics our own.

Two years earlier a citizen of Hopkinsville, Kentucky, had appealed against payment of a tax occasioned by an extension of the city limits, from which, he claimed, he received no benefits. The Kentucky Court of Appeals held that he did benefit, or would sometime benefit, sufficiently to justify the tax, but added with apparent emphasis that it would not sustain a tax where it was "palpable that persons or their property are subjected to a local burthen for the benefit of others, or for purposes in which they have no interest, and to which they are, therefore, not justly bound to contribute."⁵

At about the same time the Supreme Court of Michigan declared:

Every species of taxation in every mode is in theory and principle based upon an *idea of compensation, benefit, or advantage to the person or property taxed*. . . . Taxation, not based upon any idea of benefit to the person taxed, would be grossly unjust, tyrannical, and oppressive, and might well be characterized as public robbery.⁶

It would scarcely be possible to formulate a more precise statement of the benefit principle.

The cases that raised this issue were usually brought under state constitutional provisions requiring due process and prohibiting the taking of private property without compensation. After the adoption of the Fourteenth Amendment to the federal Constitution and the extension of its application to include tax matters, the same issue was successfully raised in the federal courts. But meanwhile litigation involving the issue of benefit was brought in the state courts with increasing frequency from the middle of the century on, and judicial pronouncements upon the proper "principle" of taxation were made with increasing assurance.

In 1854 one Southgate complained against taxes levied on his farm in consequence of its annexation by the city of Covington. He was able to point out that there was still unsubdivided land between his farm and the former city limits, although the court took cognizance of the fact that there were subdivided sections beyond his farm "containing, as we understand, some inhabitants." Nevertheless the tax was held invalid:

As Southgate has made no town upon his land and desires none . . . it would seem that if there can be a case of taking private property for public use . . . without making compensation therefor, this must be regarded as one.⁷

The court went so far as to add: "But it is the tax and not the boundary which is unconstitutional"; meaning that while the extension of the city limits was entirely legal, nevertheless the city could not levy municipal taxes upon property situated therein which did not specifically benefit from the various municipal services.

⁵ Cheany v. Hooser, 9 B. Mon. 330, 345.

⁶ Williams v. Mayor of Detroit, 2 Mich. 560 (1853).

⁷ City of Covington v. Southgate, 15 B. Mon. 498.

Some years later one Marshall sued on account of "the forcible seizure and conversion of a cow of the value of sixty dollars," for payment of school taxes. In this case there were some complicating factors, and the court held that Marshall's cow was properly converted because he received "his full share of the benefits and advantages accruing from the school system." Whereupon the court, in the course of reviewing—with approval—a long line of previous decisions, laid down this remarkable principle of taxation:

The legislature has the constitutional power to establish a municipal corporation, to define its boundaries, and to delegate to it the power to impose and collect taxes for the support of the municipal government: but this local taxation cannot be imposed upon persons or property receiving no benefit whatever from that government. It does not matter that the property is situated nor that the person resides within the corporate limits of the municipality. The taxation cannot be imposed where there are no benefits, upon the ground that it would amount to the taking of private property for public use without compensation.⁸

By 1876, Judge Cooley, in the first edition of his text, the *Law of Taxation*, upon which succeeding generations of law students have grown up, was able to write:

If it were possible to do so, the taxes levied by any government ought to be apportioned among the people *according to the benefit which each receives* from the protection which the government affords him; but this is manifestly impossible . . . income or the source of income are almost universally made the basis upon which the ordinary taxes are estimated. This is upon the assumption, . . . sufficiently near the truth for the practical operations of government, that the benefit received from the government is in proportion to the property held, or the income enjoyed under its protection; and though this can never be arrived at with accuracy, . . . experience has given us no better standard.⁹

This comes near being an authoritative statement that in this country, in 1876, taxes were "almost universally" based upon the benefit principle and on the assumption that "the benefit received . . . is in proportion to the property held."

This seems the more remarkable because the courts are ordinarily loath to embark upon statements of general principle, preferring to stay within the safety zones of the particular circumstances presented in particular cases. But in this matter of the proper theory of taxation, they spoke with increasing assurance down toward the end of the century.

In the Louisville Bridge case in 1883 the court held that a bridge across the Ohio River, but *within the city limits of Louisville*, was not subject to municipal taxation:

It is not sufficient . . . to show that the bridge was built within the corporate limits of the city . . . or that the bridge is very valuable property. . . . If all

⁸ Marshall v. Donovan, 73 Ky. 681, 692. See cases there cited.

⁹ Cooley, *Law of Taxation*, 1st ed., pp. 16, 17. Cf. Cases there cited and in 4th ed., vol. i. p. 83, note.

property is to be taxed because it is profitable to own by reason of the patronage of the city, . . . where then would the supposed corresponding benefits of the city's patronage cease?¹⁰

In the Henderson Bridge case, the court sustained the tax on the basis of a virtual contract at the time the bridge was built, but said clearly and firmly that otherwise the bridge could not be subjected to municipal taxation. Furthermore, in discussing the difference between special "districts" and ordinary municipalities, the court laid down the general principle of municipal taxation with a sweepingness that was characteristic of the courts of the time:

In the former case, the inquiry is, is the property within the taxing district? . . . In the latter case, the inquiry is, is the property benefited . . . by the taxation?¹¹

The Kansas Supreme Court finally went the Kentucky Court one better by rigidly applying the benefit test even within a specially created legislative district. This case involved a statute providing for the ploughing of "fire strips" at intervals for the prevention of prairie fires. Certain ambiguities in the wording of the statute complicated the issue somewhat, but in substance the court held the statute invalid because all taxpayers (in this case a railroad) were not so situated as to benefit from this precaution, although it was shown that the particular location of these fire strips was governed in part by the specific consideration *that prairie fires were frequently started by sparks from the railroad locomotives*.¹²

There were, of course, *per contra* cases sprinkled along through this period. It is not meant to imply that the trend we have described was a uniform one by any means, although the statement in Judge Cooley's text above would seem to imply that in the minds of legal authorities the benefit principle was the accepted principle of taxation. But it is hazardous to generalize about any uniform trends in the decisions of the federal courts and the courts of the forty-eight states; and all that we mean to point out here is the remarkable emphasis upon benefit throughout this period, in contrast with the attitude of the courts in preceding and subsequent periods.

But even in the cases *contra* it may be observed that the courts rarely made such a positive denial of the consideration of benefit as did the Ohio Supreme Court in the statement:

It is not necessary . . . that persons or property taxed therefore should be directly or pecuniarily benefited thereby.¹³

¹⁰ Louisville Bridge Co. v. Louisville, 81 Ky. 189.

¹¹ Henderson Bridge Co. v. City of Henderson, 14 S. W. 493 (Ky. Court of Appeals, 1890).

¹² Atch. Top. & Santa Fe R. R. Co. v. Clark, 60 Kan. 826 (1899).

¹³ N. Y. L. E. & W. R. R. Co. v. Commissioners, 48 Ohio St. 249. See similarly P. C. C. & St. L. R. R. Co. v. Harden, 137 Ind. 486, and B. & O. R. R. Co. v. Jefferson Co., 29 Fed. 385.

Generally, where the issue of benefit was raised by the taxpayer, the courts apparently felt it incumbent upon them to recognize the pertinence of the issue and to point out at least vague and indirect ways in which the taxpayer would receive some compensating benefit. A Kentucky court observes:

This court would scarcely undertake to say that such improvements . . . would not indirectly affect the value of appellee's property.¹⁴

The Alabama Supreme Court, in sustaining a county school tax against the objection that corporations and non-residents could derive no benefit from the public schools, called attention to the fact that such taxpayers had property to protect and that "greater security results from the moral, intellectual, and social improvement of the community, *by which the property is surrounded*."¹⁵ And when one Kelly resisted the levy of municipal taxes by the city of Pittsburgh, on the ground that on his 80-acre farm he could not avail himself of any of Pittsburgh's amenities, the United States Supreme Court consoled him with the thought that "the water works will probably reach him some day."¹⁶

There was likewise considerable "straddling" of the issue, particularly toward the end of the century, when it was becoming increasingly difficult to sustain a rigid application of the benefit principle. The United States Supreme Court held against the taxation of railway cars located outside of a state, on the ground that "the power of taxation . . . is exercised upon the assumption of an equivalent rendered to the taxpayer in the protection of his person and property, in adding to the value of his property," and so forth; and on the next page proceeded to quote with equal approval Adam Smith's ability canon of taxation!¹⁷ In the same year Judge Cooley's editors also weakened, making one grudging concession in the third edition of his *Law of Taxation*. Where Judge Cooley had said baldly in 1876, that "the benefit received from the government is in proportion to the property held," the 1903 edition says: the benefit "*bears some proportion to the property held*."¹⁸

From this time on the courts gradually relaxed their application of the benefit principle, though not relinquishing entirely their jurisdiction over tax theory. For instance, the United States Supreme Court declared in 1920:

A state law will be held to conflict with the Fourteenth Amendment only when it proposes, or clearly results in, such flagrant and palpable inequality *between the*

¹⁴ *McFerran v. Alloway*, 14 Bush, 580.

¹⁵ *So. Ry. Co. v. St. Clair County*, 124 Ala. 491.

¹⁶ *Kelly v. Pittsburgh*, 104 U. S. 78 (1881).

¹⁷ *Union Refrig. Transit Co. v. Kentucky*, 199 U. S. 194 (1903).

¹⁸ Cooley, *Law of Taxation*, 3rd ed., vol. i, p. 27; similarly 4th ed., vol. i, p. 213.

burden imposed and the benefit received, as to amount to the arbitrary taking of property without compensation.¹⁹

Here seems to be a perfect illustration of the maxim of Roman law that the "exceptio" proves the rule. In holding this particular case to be outside the scope of the rule, the Court formulates its adherence to the rule with unusual precision: a sufficiently flagrant inequality between the tax imposed and the benefit received *will* be in conflict with the Fourteenth Amendment.

Now, how far all this judicial "theory" reflected any trend of popular thinking—or helped to shape it—would be difficult to determine. We have referred above to certain obvious indications of the continued vitality of the ability theory in aggressive movements for income and inheritance taxation and other tax reforms. But nevertheless it can safely be asserted that at least the *issue of benefit* was raised with increasing frequency, in popular discussion and in legislative debates, after the middle of the past century. This was particularly true in connection with the levying of taxes for the newer types of governmental activity that were developing in that period.

Even economists and tax students from time to time gave considerable support to this point of view. The movement for "separation of sources" of state and local revenue, which attained great vogue toward the end of the century and throughout the first decade of the new, was based in part on administrative considerations; but it was justified largely on the ground that the *benefits* of local government accrued particularly to the property owners of the community, and that there was therefore a degree of appropriateness in levying upon property for the support of local government which did not obtain in the case of the state government. This was a substantial recognition of the benefit theory.

And finally, in 1925, we find a committee of the National Association of Real Estate Boards recommending: "We ought to get back to bedrock and pay in proportion to benefits received,"²⁰ the implication being that in the judgment of this group "bedrock" in tax theory was the benefit principle.

Reason for the Change

This change of emphasis from Ability in the early development of property taxation to Benefit in the period just discussed is so extraordinary that it seems to call for some specific explanation. We have referred above to the expanding social activities of modern government. The influence of this development upon the general status of property taxation in our revenue systems is familiar enough. We are inclined to think that what we

¹⁹ *Dane v. Jackson*, 256 U. S. 589.

²⁰ Committee on Taxation, in its *Report* of January 15, 1925.

are now confronted with is the influence of this same development upon the *theory* of property taxation itself.

The movement for free public schools affords a striking illustration. This movement developed with particular vigor in the period from around 1825 to the outbreak of the Civil War. It precipitated a heated conflict and a vast amount of discussion, much of which was surprisingly acrimonious. Opponents of the movement protested that it was utterly unjust to tax a man who had no children of his own in order to educate other men's children—that is, to tax one who would receive no direct benefit from the proposed governmental service. And until 1855 in Illinois the statutes provided that while school districts might be organized and might levy taxes for the support of the schools, nevertheless no one could be taxed for school purposes unless "his consent in writing was first had and obtained." Substantially similar statutes existed in a number of states.

Here was the Benefit Theory in all frankness. But its significance lies in the fact that it was the opponents of the proposed governmental activity who fell back upon the Benefit Theory, while the advocates of the proposal still adhered to the Ability Theory, arguing that elementary education was a proper governmental function, toward which citizens should contribute in proportion to their means, whether they themselves participated directly in the benefits of the particular service or not.

Now, this alignment did not arise from any *a priori* differences in tax theory but from the simple fact that property owners knew they would be subjected to heavier taxes if this expansion of governmental functions were approved. The Benefit Theory afforded them a defense which could not be set up under an Ability Theory of taxation.

And this alignment on the issue of free public schools was duplicated time after time on subsequent issues involving proposals for some expansion of governmental activities. This was particularly true toward the latter part of the century, accompanying the rapid growth of cities and the development of modern municipal activities. The establishment of high schools, libraries, and hospitals, the development of parks and playgrounds, and other municipal activities were opposed not usually on the ground of any undesirability in themselves but on the injustice of maintaining them by levies upon property owners who would derive no direct benefit from them.

And thus we had one of the most interesting examples of the influence of changing political philosophy on tax theory. The advocates of successive expansions of the sphere of governmental activities in the interest of the general public, particularly of the poorer classes of the population, necessarily stood for taxation on the basis of some form of the Ability Theory. The opponents of expansion, representing largely the property classes who would have to carry the cost of these expansions and who would participate

least in their benefits, necessarily fell back upon the Benefit Theory, as the only—or at least the most effective—prophylactic available.

Unable to make headway directly in state legislatures and city councils against the rising demand for these social services on the part of government, property holders went into the courts, sometimes on the direct issue of the propriety of governments engaging in these activities, but more frequently on the indirect issue of their right to levy taxes for the support of these activities upon property holders who would not benefit from them.

Two things made the courts of the time peculiarly sympathetic to this appeal. The first was the fact that American courts have assumed from the earliest times that one of their cardinal functions was the protection of property and individuals against the arbitrary encroachments of governmental authority. This conception grew naturally out of the conditions surrounding the adoption of the federal Constitution and out of the political philosophy prevalent at the time.

The second factor was the general acceptance among educated classes of the "contract theory" of the state, inherited from the pre-revolutionary writers in France and from the liberal philosophic writers in England. This familiar concept of government had dominated political thinking in America since the time of Thomas Jefferson. Generations of lawyers had grown up on it. Its precision and comprehensiveness commended it to scholarly minds; and its *quid pro quo*, bargaining character appealed spontaneously to a log-rolling, horse-trading democracy. Modern "organic" theories of the state and society were just beginning to take form; and the "corporative," "authoritarian," and "totalitarian" concepts of government had not yet been inflicted on an unhappy world. Consequently the contract theory of the state continued to exercise a remarkable influence upon the thought of educated groups in this country throughout the nineteenth century—surviving in some quarters, in fact, until the writer heard it expounded by Woodrow Wilson at Princeton.

In what degree the courts were specifically influenced by this philosophical background, it is of course impossible to say. But it is certain that the traditional concept of their primary duty to protect property and individuals from the arbitrary encroachments of government and their general acceptance of a *quid pro quo* type of political philosophy strongly predisposed them to listen favorably to the arguments of property holders that the proper basis of taxation was the benefit principle.

Furthermore it is apparent that the amount of litigation and the persistence with which the issue of benefit was pressed upon the courts varied very much in proportion to the activity and aggressiveness with which movements for expansion of the social activities of government were carried on—much as medical science measures the severity of infections by the vigor with which the system develops the "anti-bodies" of resistance.

Consequently, it was not a mere coincidence that this trend of judicial construction should have reached an apparent climax toward the end of the century, when "populist" and "socialistic" agitation was particularly rampant.²¹ In medical language, the Benefit Theory in taxation represented the "resistance" of a property holding democracy to the expanding concept of the social responsibilities of government. If Seligman and the other stalwarts who inveighed against the Benefit Theory could have been more aware of this unique part played by the Benefit Theory in the United States, it would have added range and precision to their heavy artillery.

III. Present Theory

This brings us to the problem whether there is any general theory of property taxation at the present time; and if so, what it is. The source for such diagnosis now cannot well be any general pronouncements of the courts, partly because the issue of relative benefit is rarely raised in tax litigation and partly because the courts are much less prone than in the past century to make general pronouncements of tax theory. Nor will it be found in the texts of academic writers, who likewise have become too cautious and too "practical" to risk any such generalization as Adam Smith's broad statement that "the subjects of every state ought to contribute towards the support of the government . . . in proportion to their respective abilities." In both courts and texts we find a cautious restraint upon general statements of contemporary tax theory.

But if we go out into the arena of current legislative and popular discussion of tax questions, it is scarcely too much to say, reversing President Cleveland's epigram, that we are actually "confronted with a theory." And however crudely or vociferously expressed, it is at bottom none other than A. Smith's "First Canon" of taxation quoted above, which, submerged from time to time beneath considerations of expediency, emergency, and partisan pressure, still rises to plague legislatures and legislative committees.

The writer has sat on scores of committees and attended hundreds of conferences and sessions of governmental and civic bodies engaged in consideration of changes in revenue systems. At the moment it would be difficult to recall one in which the issue turned on any consideration of comparative benefits enjoyed by different groups of taxpayers. Farm groups, railroads and public utilities, merchants and manufacturers, teachers' groups and labor organizations do not argue about differences in the

²¹ And when Mr. Justice Field, of the United States Supreme Court, referring to the federal income tax of 1894, declared: "The present assault upon capital is but the beginning. It will be but the stepping-stone to others, larger and more sweeping." *Pollock v. Farmers Loan & Trust Co.*, 157 U.S. 129, 607.

degree in which they participate in the benefits of government. They all do argue vociferously about how much more taxes they pay than other groups in proportion to—income, what they are "able to pay," what they can "afford to pay," or other phrase that is intended to suggest financial capacity in some form. Elaborate statistical studies are made from time to time of the burden of taxes in terms of income. And while efforts may be made to refute the statistics or to question the typicalness of the period or the conditions they represent, it seems scarcely to occur to anyone to question the assumption on which the statistics are based—namely, that any group whose taxes absorb a larger proportion of income than in the case of other groups is thereby being taxed "disproportionately."

There are particular fields of revenue to which it is understood that other considerations apply. Special assessments in both legal theory and common practice are based on specific benefits to property—however much the actual results may sometimes be in doubt. The gasoline tax is based frankly on the cost of a special service—namely, highway construction and maintenance. Numerous engineering studies are going forward at the present time in an effort to determine the differences in cost imposed by different types of motor vehicle, with a view to making motor vehicle and gasoline tax schedules reflect these differences more accurately. The movement for homestead exemption, so far as it represents an effort to encourage homeownership rather than to sell real estate, rests clearly on a socio-political principle.

But when we pass from these special fields into the broad field of general taxation, we find the disputants to a surprising degree speaking a common language, the purport of which is that taxes ought to be levied with reference to people's ability to pay. We have referred to the fact that real estate representatives have sometimes argued for taxation on the benefit principle—"that we ought to get back to bedrock and pay in proportion to benefits received." The statement itself, however, would seem to concede that in the judgment of this committee we are not now on that "bedrock." Some ingenious statistical studies have been made with a view to determining how far the calculable benefits that accrue to real estate correspond to the taxes paid. The results are inconclusive—and would be irrelevant even if they were conclusive—so far as we are concerned with the theory or philosophy of real estate taxation. Even a demonstration that taxes actually are not in proportion to benefit would not prove that these taxes are not based on the benefit principle. We are familiar with statutes whose actual results are quite different from the theory or intent with which they were adopted.

We are inclined therefore to fall back again upon the vocabulary of current discussion for a clue to the common thought upon this question.

We have quoted above the statement of a New York court in 1851, that "a rich man derives more benefit from taxation in the protection and improvement of his *property* than a poor man, and ought therefore to pay more." It would be difficult to find such an assertion in current tax discussion. There are numerous assertions, from the President of the United States down, that the rich ought to pay more taxes, but they are not based on any premise that the rich man will derive more benefit therefrom than the poor man—least of all in the "protection of his property."

In recent years particularly, when government policies have been directed more and more toward improvement of conditions among the poorer groups and toward providing, at government expense, amenities which would otherwise not be within their reach, it is apparent that the wealthier classes share less in the benefits than the poorer groups. Yet this fact apparently does not suggest to anyone that they ought therefore to pay less taxes. This "inverse correlation" between taxes and benefits would seem to imply that in contemporary thought taxes are distinctly related to something else than the benefit principle.

And if there might be any lingering doubt, the federal courts appear to have removed it in the recent Pacific Gas and Electric Company case. Here the public utility had a large amount of property which happened to be situated in the newly created Sacramento Municipal Utility District. It appeared that its taxes under this jurisdiction would amount to some \$1,900,000, which the district proposed to spend in the construction of a utility system to compete with the Pacific Gas and Electric Company. In other words, the utility not only could not possibly share in the benefit of the expenditure, but was actually assessed and taxed for its own destruction—in greater or less degree.

Here was a perfect case for protection by the court, if there were any validity in the old legal concept of the benefit principle. In substance, of course, the same situation has actually existed for many years throughout wide areas of taxation. The railroads have been paying taxes to subsidize their own competitors in the form of commercial motor transportation. The farmers have been paying tariff taxes to facilitate the destruction of their own export markets. Local industries have been paying taxes in many communities in order to subsidize the location of "new" industries to compete with them. But in most of these cases, the particular taxes have been mixed up with broader questions of general policy, where the specific issue of the tax itself was not so clear.

In the case above the Federal Circuit Court held that the question of benefit or injury did not affect the validity of the tax; that the district was a governmental body and could finance its governmental services through general taxation, "from which appellant could receive as much benefit as does an aged and dying bachelor from the tax he pays for the education

of school children."²² Evidently the "law" has changed since Judge Cooley wrote the *Law of Taxation* in 1876.

Conclusion

In summary, then, we are putting forward the hypothesis that contrary to the general idea of a more or less chronic confusion in the theory of property taxation we have actually had a fairly distinct evolution of such theory. In the early development of property taxation in this country, such taxation rested distinctly—and avowedly—on the ability principle. From the middle of the past century judicial authority and a substantial body of public opinion definitely turned toward the benefit theory. This trend in tax theory has particular significance from the standpoint of political philosophy, because it represented one sector of the broad conflict between the older "contract" theories and the modern organic theories of the state. But in the history of tax theory it proved to be only a "detour," an effort on the part of property holders to circumvent the movement for expansion of the social responsibilities of government. Failing in this, the "detour" has now returned to the main highway, the ability principle, which, in spite of recurring "breakdowns" and "collapses"²³ at the hands of academic writers, still represents the general thought of the people of this country.

In view of the seeming clarity of this evolution, it is a source of some mortification to find so many of our academic colleagues still arguing that real estate taxes rest on the benefit principle, or straddling the issue with a vague declaration that property taxes rest on no particular theory but necessity for revenue. And while this is in no sense intended as an ultimatum, we cannot refrain from saying, in the current diplomatic mode, that any continuation of such efforts to build a fictitious "benefit" basis for the general property tax will—in the mind of the writer—"create a grave situation."

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²² *Pac. Gas & Elect. Co. v. Sacramento Mun. Utility District*, 92 Fed. (2nd) 365. The U. S. Supreme Court refused to review the ruling.

²³ Cf. its latest "collapse" at the hands of Professor Kendrick, in the *American Economic Review* of March, 1939.

ELEMENTS OF INDETERMINACY IN THE THEORY OF NON-PERFECT COMPETITION¹

Recent analysis of non-perfect competition has not shown what changes in the nature and interpretation of demand and cost curves such analysis requires. We try to remedy this situation and to demonstrate the elements of indeterminacy that arise. It is first necessary to make a clear distinction between "imperfect" and "monopolistic" competition, and to re-define "commodity" in the technical manner which is most useful for the theory of non-perfect competition. It is then demonstrated that the close relationship of relative indivisibilities of factors of production to non-perfect competition results in a highly discontinuous cost curve with possible multiple equilibria. Since relative bargaining power of buyers and sellers of factors is important for non-perfect competition, the cost curve cannot be derived from production functions alone and is of doubtful and perhaps irregular shape. The necessity of considering reactions of rival sellers as well as of buyers requires replacement of the "demand curve" by the "estimated average revenue curve" whose shape is unknown and possibly discontinuous. The dominance of the profit motive cannot be assumed for non-perfect competition analysis. If the relative strength of other motives is known, a determinate equilibrium can be obtained; but in reality we do not know enough about entrepreneurial behavior to describe equilibrium conditions.

Among the contributions to the theory of non-perfect competition (by which I mean both imperfect and monopolistic competition) there are few which are concerned with an examination of the basic tools and concepts of economic analysis, with the purpose of seeing whether or not their usefulness and accuracy is unimpaired for this branch of economic theory. The nature and interpretation of cost curves, demand curves, and assumptions about entrepreneurial motivation, remain the same as in the Marshallian analysis of competition and monopoly.² In this paper we are interested in demonstrating the need for revision in these tools and concepts in the light of problems raised by the theory of non-perfect competition, and in indicating the elements of indeterminacy that result from such revisions.

I

Certain problems of definition must be disposed of before we can turn to the main subject of this study. It will be noted that I have used "non-perfect" competition as a blanket term to cover both imperfect and monopolistic competition. I have done so in order that the primary conclusions of this analysis should be independent of the controversy over the distinction between the two forms of "non-perfect" competition. If the reader will bear with me, however, I should like to comment briefly on this controversy *passim*. Kaldor's distinction,³ in which imperfect competition is restricted to cases where the non-perfection of competition is due to economies of

¹ I am indebted to discussion with Professors Edward Chamberlin, F. B. Garver, J. R. Hicks, and Mr. Nicholas Kaldor.

² For example, Chamberlin (*Q.J.E.*, August, 1937, p. 500): "The cost curve of the firm has the same U-shape, whether under pure or monopolistic competition."

³ "Professor Chamberlin on Monopolistic and Imperfect Competition," *Q.J.E.*, May, 1938, p. 529.

scale, and monopolistic competition covers cases where freedom of entry is lacking, would be acceptable except for the difficulty of attaching significance to "freedom of entry" in this connection. Presumably, the term means freedom to sell the same commodity in the same market. Yet the degree to which such freedom is lacking is little indication of the degree of non-perfection of competition. Without being able to sell the same commodity, new firms might be able to come in with similar commodities to an extent which eliminates super-normal profits altogether. Also, economies of scale, which imply the existence of relatively indivisible factors of production, are themselves a phenomenon which limits the freedom of entry.

There seem to me to be methodological attractions in using the term "imperfect competition" for cases where monopoly elements are due to a limitation of numbers of sellers of the same commodity, and "monopolistic competition" for cases of differentiation of product. This definition is not identical with Kaldor's; one might, for example, have small numbers due to restrictions on the freedom of entry. The analysis of the product differentiation case is essentially the old analysis of monopoly, with problems of selling costs and variation in product added. The analysis of duopoly and oligopoly has a form of its own, and is analogous to the purely competitive case in that all sellers produce the same commodity for the same market.⁴

The question of defining "commodity" and "market" cannot be avoided no matter what definitions we adopt for imperfect and monopolistic competition, and is essential to any analysis of non-perfect competition. The usual "subjective" definition of commodity suffers from conspicuous limitations, particularly for the analysis of monopolistic competition. The general criticism is that it involves a certain circularity in reasoning. The definition really means that commodities are the same if they have identical utility functions or demand curves. Since, however, the best we can do objectively is to see whether at any time two commodities have the same price, and so regard them as being the same commodity unless we have technical reasons for rejecting such a conclusion, we are pretty much in the position of saying that two commodities are the same if they have the same price, and they have the same price because they are the same commodity. By adopting a purely technical definition of commodity, stating that two commodities are the same if they are technically identical, we avoid such ambiguities.

The technical definition has an added advantage for the analysis of monopolistic competition, since it provides the basis for a clear distinction between selling costs and production costs. If we use the subjective definition, which is implied at certain stages in Professor Chamberlin's analysis,

⁴ Professor Machlup's definitions, formulated in this *Review* for September, 1937, would be more acceptable if they did not involve the apparently paradoxical concepts of "imperfect pure competition" and "perfect monopolistic competition."

his definition of "selling costs" becomes rather meaningless. He regards as selling costs those costs which are undertaken to increase the demand for a given commodity; and these costs, with the subjective definition of commodity, are either non-existent or would be all those which do not merely increase the output of a given commodity. The entrepreneur undertakes milling costs because the demand price for a given number of tons of wheat is higher when it is in the form of flour; and he undertakes advertising because the demand price for a given output of advertised goods is higher than for unadvertised goods. If one interprets "given" loosely, then nearly all costs are selling costs; or if one interprets "given" rigidly, there are no costs which can change the demand for the commodity, since "a given commodity" is *by definition* a commodity with a given demand curve. Yet the distinction between selling and production costs is an important one. The entrepreneur clearly has the choice of improving his commodity in a technical sense (or increasing the output of a given commodity), on the one hand, and of increasing the demand for a given technical commodity on the other, through advertising, window dressing, expert salesmanship, etc. It seems desirable, therefore, to retain Professor Chamberlin's definition of selling costs, and to scrap the subjective definition of commodity.

This definition, is, of course, not without difficulties of its own. In the first place, under our definition such things as packaging would be production costs, since they change the technical nature of the commodity. Some might protest that expenditure on packaging is more closely related to advertising than to other changes in the form of the commodity; but from the technical production viewpoint packaging is clearly a change in the commodity itself. Also, a question arises as to how much we want to include in "commodity" and how much in "market." We can explain the difference in the price of a technically identical hat sold in the basement and sold in the college shop of the same store as being due to a difference in "markets"; or we can regard the environment of the hat in each case as part of the technical attributes of the commodity itself. The former solution seems to me more convenient and more realistic. The willingness to pay a higher price in the college shop is in most cases due to imperfect knowledge; very few would pay the higher price if they *knew* that the hat was the same in the basement. In the case of imperfect knowledge, there is a real difference in the markets. In the other case where a customer knowingly pays the higher price in the college shop, we can say that she is buying *two* commodities, a hat and a more pleasant environment.

II

Returning now to the main line of argument, we devote our attention first of all to elements of indeterminacy associated with cost curves. These elements arise out of the relationship between non-perfect competition and

relative indivisibility of factors of production. It is quite clear that relative indivisibility is not the *only* cause of non-perfections;⁵ with complete divisibility, one or more factors may be controlled by one or a few firms, in which case competition is not perfect. On the other hand, in the realistic case where relative indivisibilities do exist, there is a high degree of probability that non-perfect competition will result. It is conceivable that while there is a relative indivisibility from the point of view of an individual firm, yet the magnitude of the relatively indivisible factor or factors is small as compared with the market for its product, so that there can still exist

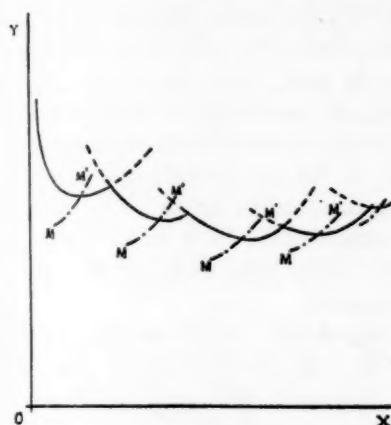


FIG. 1

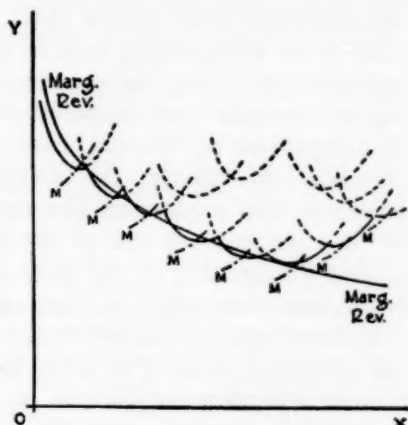


FIG. 2

such a large number of firms that no one of them can influence price. This case is the one in which the U-shaped cost curve tangential to a horizontal price line applies. In the other cases, where the magnitude of the investment in the fixed factor is large relative to the market for the product, the number of firms is limited, and imperfect competition exists.⁶

In other words, relative indivisibility of factors of production is an important cause of non-perfect competition.⁷ When non-perfect competi-

⁵ Kaldor makes the statement that "if full divisibility of all factors is assumed, and consequently economies of scale are absent, the free play of economic forces would necessarily establish perfect competition" (*loc. cit.*, p. 520). Kaldor's own subsequent analysis indicates that this is true only if free entry is also assumed.

⁶ It could happen by accident that the addition of one more firm to the industry brings down the price of the commodity to the average cost of this marginal firm and no further, so that the competitive equilibrium is established. It is far more likely that an additional firm will be compelled to produce on such a scale, if it is to compete at all, than that the price will be brought down below its average cost. In this case the additional firm does not enter, and the industry is left with a margin of monopoly profit for the marginal and all other firms.

⁷ When we have both freedom of entry and perfect divisibility, which are usually assumed necessary for perfect competition, we are forced to the conclusion which Chamberlin

tion results from this factor, indeterminacy may exist, since the cost curve becomes discontinuous. If we assume that entrepreneurship is the only relatively indivisible factor, the cost curve of a firm would have the appearance of that in Figure 1. Each one of this "family" of curves shows the locus of average costs. As we move to the right from one curve to another, the number of units of the fixed factor "entrepreneurship" is increased by one. (Entrepreneurship is measured here in terms of numbers of men, not in efficiency units.) The solid parts of the curves show possible equilibrium position; that is, per-unit costs with combinations of factors that might be chosen by the entrepreneurs. Each of the average curves has, of course, its own marginal curve, marked MM' . At first the curves become lower as we move to the right, adding units of entrepreneurship, due to possibilities of specialization within the entrepreneurial task; then the curves become higher, since after a certain point is reached, increasing the number of units of entrepreneurship does not increase the ability of the entrepreneurial body (the board of directors, for example) to foresee changes and coordinate other factors of production. The curves also tend to flatten out as we move to the right and the size of the entrepreneurial body is increased; the *relative* indivisibility of the indivisible factor diminishes as the "fixed" factor, entrepreneurship, is increased in size.⁸

If there is another factor which is more divisible than entrepreneurship, but indivisible relative to other factors (say blast furnaces) the curve becomes still more complicated, as in Figure 2. We could go on adding such complications almost indefinitely.

The possibility of multiple equilibria is obvious. One needs only to run a marginal revenue curve through as is done in Figure 2. We could have almost any number of equilibrium points, some stable and some unstable. Which equilibrium point will actually be established cannot be determined

calls "absurd" (*loc. cit.*, p. 565) and which Kaldor argues is unnecessary (*loc. cit.*, p. 520); *viz.*, that there will be an infinite number of firms each producing an infinitesimal output. As long as any profit margin exists, new firms will come in to take advantage of it. The cost curve for both the firm and for the industry will be a horizontal straight line, there being neither economies nor diseconomies of scale. The demand curve for each firm can be represented by a horizontal straight line, not merely because "producers take prices as given" (Kaldor, *loc. cit.*, p. 520) but because it is mathematically a point, and so has the properties of a straight line. The cost-line and the demand-line for each firm will be tangential to each other. The length of the demand-line is determined by the number of firms; if that number be n , each firm will sell $1/n$ of the total output. The cost-line will presumably extend beyond the demand-line; but at some point it will turn sharply upward, where the supply of some factor of production is exhausted. Where this point will be depends upon the number of firms relative to the supplies of the factors. It is conceivable that the limit to the output of the firm may be the upturn of the cost curve. Strictly speaking, the number of firms cannot be "infinite," unless entrepreneurship is itself a perfectly divisible factor. If it were not, the number of firms would be limited by the size of the population. Such analysis merely shows how unrealistic the perfect competition case is if rigidly interpreted.

⁸ See below, note 9, *re* Miss Joseph's presentation of this point.

by equilibrium analysis; it depends upon the output at which the firm starts production.⁹

The discontinuity of the cost curve will exist also in the case of pure competition with relative indivisibility, but here it is of no significance. The demand curve for each firm is regarded by the entrepreneur as a horizontal straight line, and equilibrium is established where the minimum point on the lowest of the "family" of curves just touches this demand curve. No indeterminacy is introduced by the complications in the cost curve, and all but the lowest curve can be ignored.

The second cause of indeterminacy on the cost side arises out of the relationship between non-perfect competition in the commodity market

⁹ Many writers have recognized the discontinuity of the cost curve, but its relationship to imperfect competition, and its significance for equilibrium determination has not been made clear. Harrod ("The Law of Decreasing Costs," *Econ. Jour.*, Dec., 1931, p. 575) draws that part of our Figure 1 in which the curves descend as one moves to the right, and draws an "envelope" curve in such a way as never to lie above any one of the "family" of curves. He then says: "Such a curve (the envelope) may be called the long-period production cost curve, for it shows the cost of producing the normally required output x_1 , if that is properly foreseen." The "envelope" would fit this characterization only if factors were perfectly divisible; otherwise only those points on it which are actually tangential to one of the "family" of curves is a possible equilibrium point. But if factors are perfectly divisible, there is no "family" of curves, but only a single horizontal straight line. Since Harrod is discussing the case of perfect competition here, perfectly divisible factors would seem to be the logical thing to assume; but his discussion on p. 574 indicates that he had in mind relative indivisibilities. Viner (*Zeitschr. f. Nationalökon.*, 1931-32, Band 3, pp. 33-36) uses a curve similar to Harrod's. As the curve appears, the "envelope" is drawn through the minimum points of the curves comprising the "family"; but in a footnote Viner points out that he instructed his draftsman to draw the envelope as Harrod drew it. The point is of little consequence, since no envelope curve that could be drawn represents the range of possible equilibrium points. Viner recognizes that only those points on the "envelope" are relevant that touch the "family" curves; but does not point out the multiple equilibrium situation inherent in this fact. Also, Viner represents the case of "constant costs" by an "envelope" which is a horizontal straight-line tangential to the minimum points of a "family" of U-shaped curves. Since constant costs can occur only with perfect divisibility of factors, only the "envelope" is of any importance in this case. Miss Joseph (*Econ. Jour.*, 1933, p. 390 ff.) points out that as the number of units of the fixed factor is increased, the amplitude of the "family" curves diminishes, and that they eventually flatten out altogether. The "family" of curves is drawn so that the minimum points lie along the same horizontal straight line, which is legitimate only if varying returns to entrepreneurship are assumed out of the picture, as well as changes in the price of the factors which Joseph explicitly excludes. She next considers the case where variable factors are produced under conditions of discontinuous costs, and by taking the average ordinates of the family of curves and drawing a line through them, she gets a downward sloping curve which she calls a "supply curve." There is no justification for taking average ordinates, and the "supply curve" so obtained is of no significance whatsoever for equilibrium determination. Meyers (*Elements of Economics*, p. 112 ff.) has the curve drawn correctly, but calls it a "planning curve," which he defines as "the cost curve that would confront such a firm before it starts." It is true that once a given amount of plant is constructed, one cannot move back along the curve, but one can still move forward. Meyers also neglects to point out the multiple equilibrium possibility, and the resulting indeterminacy, which is the significant conclusion from the recognition of the correctness of such a discontinuous cost curve.

and non-perfect competition in the factor market. The two often go together. If the non-perfection takes the form of imperfection, the limitation on the number of sellers of finished goods also means a limitation in the number of buyers of factors of production. If the non-perfection is due to differentiation of the product, all or most of the factor ultimately responsible for the differentiation must be employed by one firm, and "monopsony" exists. It is true that in many cases the monopsony is of no great significance, because the cost of the differentiating factor may be minor, or may be invariable with changes in output. Such is the case with a patent, or a brand-name established through advertising. On the other hand, it is clear that the existence of a monopsony in the factor market will permit differentiation in many cases, and so lead to monopolistic competition. In any case, monopsony and oligopsony in the factor market do exist, and the theory of non-perfect competition ought to include such phenomena.

Firms in a monopsonistic or oligopsonistic position are able to pay less than the marginal productivity rates to factors of production¹⁰ Very often, such a situation leads to the organization of an opposing monopoly by the sellers of factors of production, such as trade unions or coöperatives for the sale of raw materials. The market is then made up of a monopsonistic employer and a monopolized supply of the factor of production, as it often is in reality. The conditions are essentially those of Edgeworth's bilateral monopoly case; and the price of the factor of production is indeterminate within certain limits, depending upon the relative bargaining power of the two parties to the exchange. The shape of the cost curve confronting the entrepreneur is likewise indeterminate, since it depends upon the way his relative bargaining power changes with changes in output. One might hazard the guess that these complications would increase the curvature of the cost curve; so long as output and the number of units of the factor employed remain small, the entrepreneur has a good chance of exploiting those factors which have no alternative employments which offer a similar return. As the size of the firm increases, the danger of organization of sellers of factors of production also increases. Historically, such organization has taken place when both the industry and the firms composing it have increased in size; the organization of labor in railroads or steel, or of dairy farmers into "coöps" to protect themselves from oligopsonistic creameries, are examples.¹¹ It is difficult to distinguish movements *along*

¹⁰ Mrs. Robinson's analysis of monopsony finds its best application to the case of factors of production, for then the marginal utility curve of her diagram, which is at best of doubtful validity, is replaced with a marginal productivity curve, which is not subject to the same psychological ambiguities.

¹¹ The author is well aware of the pitfalls in this generalization. Yet in cases where industrial expansion has not been accompanied by expansion of firms, there has been little organization of the factors used by these firms. Agriculture is the obvious example; as yet there are no farm-hands unions. Where personal contact between employer and

cost curves and movements of cost curves in this respect. On the whole, it must be admitted that economic analysis by itself is unable to determine the shape of the cost curve when questions of relative bargaining power are involved; and unless we know the shape of the cost curve, we cannot demonstrate equilibrium determination.¹²

III

We turn next to elements of indeterminacy on the demand side. Since this question has already received some attention,¹³ we can dispose of it more briefly. Under non-perfect competition, the demand curve which is relevant for entrepreneurial decisions is not derived from consumers' indifference curves alone. Its shape depends also upon the reactions of rivals to the price policy of the firm. More accurately, the *estimated* average revenue curve upon which an entrepreneur bases his decisions will derive its shape from the ideas the entrepreneur has about the reactions of consumers *and of competitors* to changes in his price or output. This fact introduces two kinds of indeterminacy. The first kind of indeterminacy relates to the probable shape of the estimated average and marginal revenue curves. By indifference curves analysis, we can show that demand curves for commodities will be downward sloping throughout their length, except under unusual conditions that can be specified.¹⁴ We have good reason to suppose that if the monopolist could ignore the reactions of rivals, he would find out this tendency of the demand curve to slope downwards, and his estimated average revenue curve would have at least the same general configuration as the demand curve itself. We have no such sound logical basis for deducing the shape of the estimated average revenue curve when

employee is important, unions are not so likely to emerge. On the other hand, there are clearly exceptions to this rule, such as barber shops and restaurants. My main object is to show the difficulty of any generalization whatsoever about variations in bargaining power with changes in the output of the firm.

¹² The fact that the shape of the cost curve does not always depend entirely upon production functions has serious ramifications for economic policy, of which I will mention only one. The usual reply to the protectionist argument that imports from "cheap-labor" countries are a threat to the standard of living is that "cheap" labor is also inefficient labor, and low wages do not mean low costs. This argument holds only under conditions of pure competition in the factor markets. Where wages are low in "cheap-labor" countries because of monopsonistic exploitation of labor that does not exist at home, there is a real cost-differential between the two countries. Importation of commodities from these countries will force domestic labor into occupations where marginal productivity is lower, and if pure competition rules at home, wages at home will therefore also be lowered. Thus importation from monopsonistic "cheap-labor" countries does constitute a threat to the standard of living of high-wage competitive countries.

¹³ See e.g., *Am. Econ. Rev.*, June, 1937, p. 324-5, "Round Table on Monopolistic Competition," communications of Emil Lederer and B. H. Higgins.

¹⁴ *Viz.*, that a commodity be highly substitutable for but inferior to another, and that a large proportion of expenditure be spent upon it. Even here, of course, the demand curve can rise only over a portion of its length.

rivals' reactions are included, and it is clearly not a thing easily obtained statistically. Thus we find ourselves without adequate tools for handling this case.

The second type of indeterminacy arises out of the fact that, even if we could deduce accurately the shape of estimated revenue curves, there is a strong probability that their shape would be such as to yield multiple equilibria. The estimated average revenue curve is likely to rise over certain ranges and fall over others. An entrepreneur may expect a reduction in his price to lead to a greater cut by a rival firm, thus leading to a reduction in his own sales; while a still further cut may drive out the competitor altogether, or drive him to the upper part of his demand curve, where he will content himself with the exploitation of his own "clientele-buyers,"¹⁵ resulting in a large increase in the sales of our entrepreneur. In such cases there could be several points of intersection between the marginal revenue curve and the marginal cost curve, even if the latter is of the familiar continuous U-shape. Here again, in order to show which of these points will actually be the equilibrium point, we must know the scale at which the firm begins operations, which is not a datum obtainable by economic analysis.

IV

The third source of indeterminacy is the status of the profit-motive assumption in the analysis of non-perfect competition. The assumption that entrepreneurs are guided in their decisions solely or predominantly by the desire to maximize profits is retained in all orthodox theory of non-perfect competition. This assumption is, of course, perfectly permissible as a simplifying device in preliminary stages of analysis. If on the other hand we want to develop a theory which will explain what we see in reality, or provide a basis for policy, this assumption must be modified.

In the analysis of perfect competition, the maximization of profits by entrepreneurs is a situation that must exist *ex definitione*. First, we are accustomed to defining normal profits as the "transfer cost" of entrepreneurship; *i.e.*, the amount which is necessary to keep the firm in operation. Second, we exclude supernormal profits from the case of perfect competition. Therefore, entrepreneurs under perfect competition *must* maximize profits or disappear altogether. The same analysis applies to the "tangency case" of monopolistic competition.

With non-perfect competition, and except for the "tangency case," no such necessity for the maximization of profits exists. The entrepreneur has a margin with which to work and with which to satisfy desires other than the desire for profit. These desires can be put into three classifications:

¹⁵ That is, those that buy from a particular firm from habit or preference, as distinguished from the "shoppers" who are price conscious and change their firm for small advantages in price.

those which induce the entrepreneur consciously to fall short of the output¹ which maximizes profits, those which induce him to go beyond this output,² and those which merely induce him to stay where he is, on whatever side of the maximum profit position he may happen to be. In the first category the most important motive would be desire for leisure. Generally speaking, it takes more time and energy to manage a large concern efficiently than to manage a small one. In the second classification would be the desire to own a large firm for the prestige it gives, desire to employ more labor or sell at lower prices for the feeling of righteous self-satisfaction that goes with it or

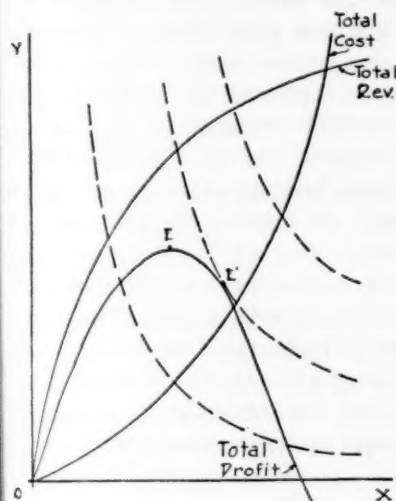


FIG. 3

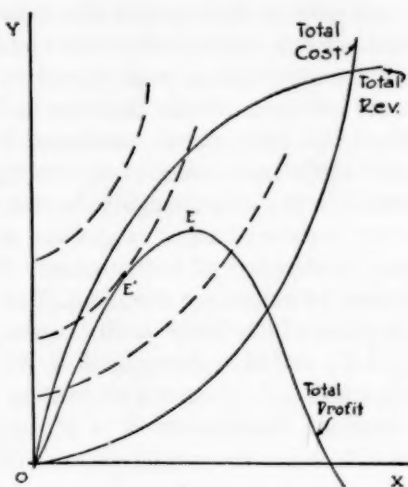


FIG. 4

from high ethical standards, desire to avoid difficulties with the government and its "anti-monopoly" investigators.¹⁶ The desire to avoid labor trouble might come within either of these two categories. In the third category would be custom and habit, ideas of "just price" or price-regulation, and most important, the limited range of the "estimated revenue" curves plus unwillingness to take the risk of experiment.¹⁷ An entrepreneur may start production at a certain output, and find himself making a substantial profit. The entrepreneur has very limited knowledge of the effects of changes in his price policy. He may have a vague idea that more profits could be made

¹⁶ One might argue that in this case the entrepreneur is maximizing profits in the long run; yet an entrepreneur may feel confident of victory in his disputes with the government (or with labor) and still avoid disputes for their unpleasantness. In any case, the short-run equilibrium would be different from that usually depicted.

¹⁷ The problem does not arise under pure competition, since the estimated average revenue is horizontal throughout its length, and entrepreneurs are not forced to guess the effects of changes in their output.

at a higher or lower price; but he is not sure which, and rather than take the risk of loss, he contents himself with his present income. In other words, the range of the estimated marginal revenue curve is not the range within which it cuts the marginal cost curve, due to the accidental output at which the firm starts.¹⁸

The first two categories do not introduce any elements of indeterminacy provided the relative strength of the various motives are known. In Figures 3 and 4, units of commodity are measured on the x -axis and units of money on the y -axis as for demand and cost curves. The "total profit" curve is found in each case by subtracting "total cost" from "total revenue" for every output. Each output also implies a certain price for the commodity, and a certain expenditure of time and energy by the entrepreneur, as well as certain expectations with regard to government and labor activity, etc.; there will be a definite functional relationship between output and each of these. All three curves mentioned are "ex ante" curves. The dotted lines are indifference curves of the entrepreneurs between *income* and *output*, with all the accompanying factors which are implied by given outputs (entrepreneurial effort, righteous self-satisfaction, etc.). In Figure 3 the case is depicted of entrepreneurs for whom the motives stimulating increases in output are dominant. The equilibrium point will be the point of tangency of the "total profits" curve with an indifference curve. This point is at E' , and is to the right of E , the point at which profits are maximized. Figure 4 is the case where motives tending for restrictions in output are dominant. Equilibrium is at E' , to the left of the maximum-profit point at E .¹⁹

¹⁸ The story of railway rates during the last depression might be a case in point. The railways discovered under pressure that they made more profits by giving good service at low rates than bad service at high rates, but they needed government intervention to find it out.

¹⁹ For those readers not accustomed to indifference curve analysis, some explanation of the apparatus used in this paragraph may be desirable. Each "indifference curve" represents combinations of income (profits) and output (with the expenditure of time and energy, expected government reaction, prestige, etc., which each output implies) between which the individual is indifferent; each of the infinite number of such combinations constituting an indifference curve provides the individual with the same amount of satisfaction. In Figure 3 these curves are convex to the Y -axis, because in the case which it depicts any decrease in income must be compensated for by an increase in output (and all that output implies) if the individual is to remain on the same level of satisfaction. In Figure 4 the curves are concave to the Y -axis, since in this case the individual can be compensated for a loss of income only by an accompanying loss of output (and all that output implies). As one moves along any straight line away from the origin, one reaches "higher" indifference curves; i.e., each successive curve reached represents combinations which the individual prefers to any combinations on a "lower" curve. The individual will, therefore, try to reach the highest possible indifference curve. The "total-profit curve" defines the locus of all possible combinations of income and output. The individual will move to the point on this curve which is on the highest possible indifference curve. This point will be where the total-profits curve is tangential to an indifference curve.

Thus a determinate equilibrium in quantitative terms is demonstrable provided we know the shapes of the (estimated) cost and revenue curves, and also the shapes of the indifference curves of the entrepreneurs for output and income. Whatever may be the difficulties of getting the former, the difficulties of getting the indifference curves are clearly greater. While no *conceptual* difficulty is involved, these considerations mean that the usual analysis of imperfect and monopolistic competition do not provide a complete basis for economic policy.

The cases in the third category are still worse, since they present conceptual difficulties not surmountable by economic analysis. We may know the shape of the (estimated) cost and revenue curves, over those ranges of output for which the entrepreneur has any ideas about them; and we may know his "behavior patterns"; but the marginal revenue and marginal cost curves may not intersect within these ranges, and the entrepreneur may stick to his original output from sheer uncertainty and unwillingness to take chances, or through price-regulation, etc. In this case, we are again in the position of being unable to show the equilibrium point unless we know the scale of output at which operations are begun.

It should be pointed out that the indeterminacies with regard to motivation are like the indeterminacy as to the shape of the estimated revenue curves. It is not a case here of being unable to show which of a number or range of known equilibrium points will in fact emerge. It is a case of simply not knowing where any equilibrium point is at all, from lack of knowledge of entrepreneurial behavior.

This fact suggests the need for a type of empirical research different from that usually conducted in the field of economics. The possession of a statistical demand or supply curve, no matter how accurately derived, does not provide a solution. We must also know whether these curves conform to entrepreneur's ideas about them, and what in fact guides their business policy. That desire for profit will be a motive there can be little doubt; and on this basis alone we can say something about the direction of change from one equilibrium to another as the result of a change in demand or cost. However, we also want to know what the equilibrium itself is like. Thus we need to find out how entrepreneurs behave; and since this is a special problem which we have no right to leave for psychologists, we must conduct investigations ourselves.

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PRICE INFLEXIBILITY AND CHANGES IN PRODUCTION¹

Gardiner Means's conclusions regarding the inverse relationship between changes in prices and changes in production during a depression have been widely circulated. These conclusions, however, were based upon such a small number of non-comparable instances that they are suspect. A survey of the B.L.S. wholesale price index reveals 264 commodities for which production or import data were obtainable. Examination of these data indicates that the price-production relationship is far more complex than has usually been assumed. Diversity of behavior, rather than conformity to a uniform pattern, is shown. Although there is a broad drift in the direction suggested by Dr. Means, it is within such wide limits and has so many exceptions as to have little practical significance as a guide to policy for individual commodities. Prices and production of products in the same or related industry classifications tended to show similar movements. Characteristics of a product rather than extent of price changes appear to furnish the more significant explanation of production changes.

Although price inflexibility has been discussed widely in recent years, the facts concerning its relationship to changes in production have thus far failed to receive adequate study. Ralph C. Woods in his discussion of "Dr. Tucker's Reasons for Price Rigidity,"² states:

Dr. Means has shown a striking correlation (between price and production changes) in the case of ten selected commodities. But until the correlation is shown to be significant for a much larger and more representative number of commodities, judgment must be suspended on the question which this correlation was designed to answer: Whether the declines in output of the inflexibly priced products would have been substantially less in the great depression had the prices of these products been relatively flexible.

Although it is difficult, if not impossible, to indicate what might have happened if inflexible prices had been more flexible, this same difficulty does not extend to the ascertainment of relationships that actually prevailed.

Before indicating the results of an extensive study of the relationship between price and production changes from 1929 to 1933, it might be well to clear up one error in Woods's statement as quoted above. Dr. Means did not present data for ten selected "commodities." His ten items included averages for groups of different products (*e.g.*, food products) as well as data for individual commodities (*e.g.*, cement). A study of the classifications and sub-classifications of the Bureau of Labor Statistics index indicates no logical basis for selection of the data used. Thus it is found that three series are for major classifications (*e.g.*, agricultural commodities, food products and textile products), six represent selected sub-classifications (leather, petroleum products, iron and steel, agricultural implements, automobiles, and cement), and the tenth was auto tires, a miscellaneous classification.

¹ The writer desires to express his thanks to the National Industrial Conference Board for permission to use data gathered while conducting a special study of inflexible prices for that organization.

² *Am. Econ. Rev.*, Dec., 1938, pp. 671-2.

cation. As the Bureau of Labor Statistics listed 10 major classifications and 34 sub-classifications, for many of which data are available, serious question may be raised as to the value of such selected data as used by Dr. Means. Furthermore the significance of any relationship reported for cement or auto tires is much different from that for textile products which represented an undifferentiated total including commodities with such diverse trends as silk, wool and rayon.

In describing any economic phenomena one must be careful not to confuse cause and effect. To discover that in some instances high prices and low production occur together does not necessarily mean that the high price causes the low production any more than the reverse would be true. It may have been that the ability to control production made possible the maintenance of price rather than the high price causing the decline in production. If no causal relationship can be firmly established then policies based on an assumed relationship may not achieve the results desired. Thus the implication that demand and hence production and employment would be maintained merely by reducing price during a period of depression might not be substantiated if factors other than the price of product were the primary influence upon its demand. A similar type of confusion has prevailed in many quarters concerning the relationship between the level of prices and business conditions. Because high or rising prices have usually accompanied good business conditions in the past, some "planners" have assumed that high prices caused good business and hence the type of monetary experiment, with emphasis upon price raising, characteristic in the United States during the last few years.

But neither assumption nor coincidence is proof of causal relationship. A first step must necessarily be a comprehensive survey of the facts to ensure that the "coincidence" discovered is typical—for unless this is the case no sound reason would exist for even making an assumption regarding causal relationships. When the sample is broadened, however, the apparent relationship between price rigidity and the level of production is found to be not so close as suggested by Dr. Means. Complete coverage and selected sampling frequently give diverse pictures.⁸

The 550 commodities included in the Bureau of Labor Statistics index in 1929 were taken as a starting point in the study of price changes. Unfortunately a number of prices were not available for both 1929 and 1933 on a comparable basis as the result of changes in the grade or quality of the commodities included in the index for the two years. Fifty-five commodities were eliminated on this basis. An additional 116 com-

⁸ This discussion is confined to relationships within the existing institutional system with all its rigidities and inflexibilities. Whether responses would have been markedly different or the extent of the depression substantially modified if all prices had been flexible is outside the scope of this study.

modities represented quotations for different grades of the commodities included. For example, there were 17 prices quoted for butter in the Bureau of Labor Statistics index. A simple average was computed for these 17 prices and then compared with the total production. After eliminating these duplications there remained approximately 380 commodities; production⁴ or import data were secured for 264, or about seven-tenths of the total. The distribution of these data in terms of the Bureau of Labor Statistics commodity classification and as to the nature of the goods (raw materials, semi-finished, and finished) is indicated in the following table:

DISTRIBUTION OF COMMODITIES FOR WHICH PRODUCTION AND PRICE DATA WERE OBTAINED FOR 1929 AND 1933

Commodity group	Raw	Semi-finished goods	Finished goods	Total
I. Farm products	31	—	—	31
II. Foods	4	6	27	37
III. Hides and leather products	4	2	1	7
IV. Textile products	4	6	17	27
V. Fuel and lighting	5	—	10	15
VI. Metals and metal products	2	17	31	50
VII. Building materials	3	3	29	35
VIII. Chemical and drugs	4	2	43	49
IX. Housefurnishing goods	—	—	2	2
X. Miscellaneous	1	2	8	11
Total	58	38	168	264

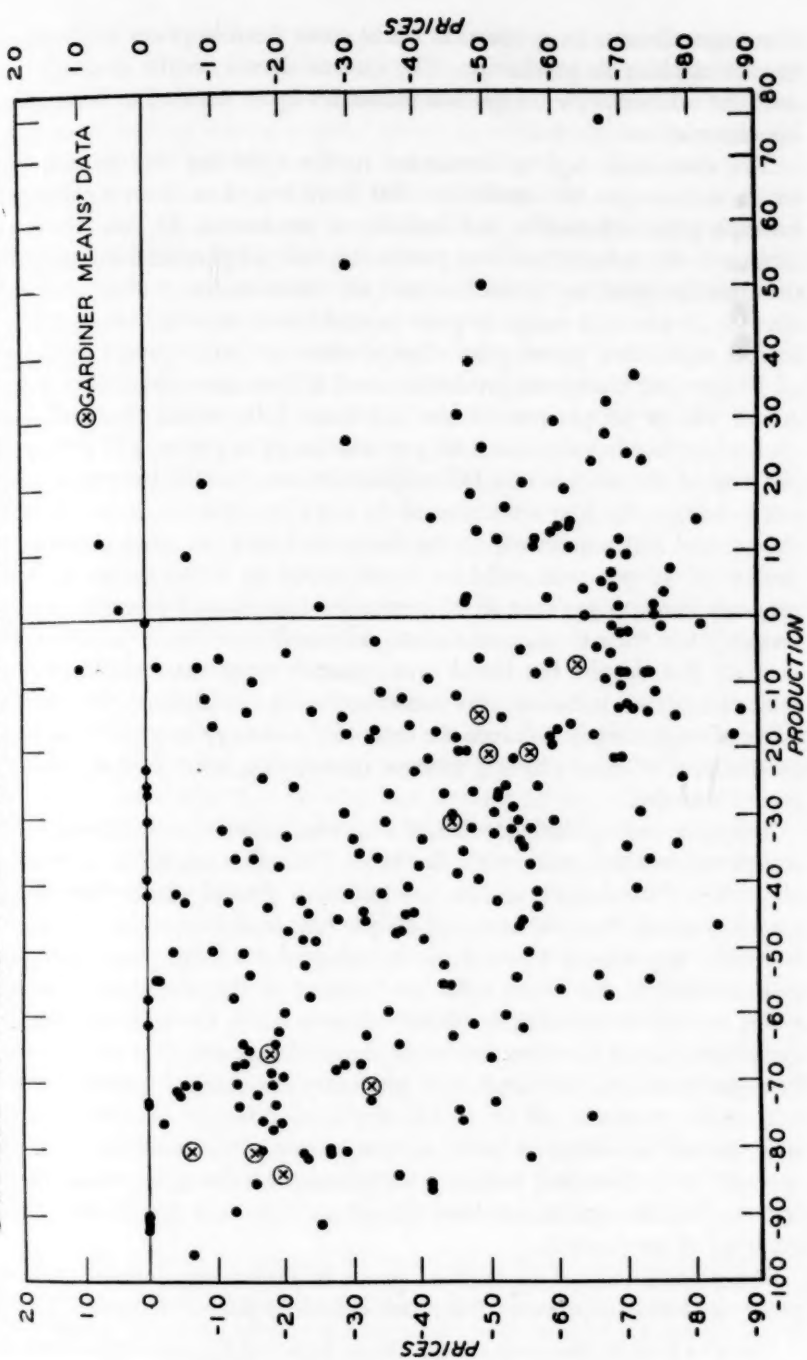
The accompanying scatter diagram shows the relative changes in price and production (or imports) for each of the 264 commodities. Prices are measured on the vertical axis and production on the horizontal axis with the changes measured from the 1929 level in both cases. The two zero lines reflect no change in 1933 as compared with 1929. Price changes are measured as the difference between the monthly high in 1929 and the monthly low in 1933, and production and imports are the annual data for the two years.⁵

The data are plotted so that a trend downward from left to right would confirm Means's conclusions—that is, inflexible prices are accompanied by

⁴ There were 23 instances where imports were used. Included in the 241 production figures were 12 representing receipts at public stockyards or federal inspected slaughter. The primary sources of these data were: *Census of Manufactures*; *Survey of Current Business*; *Standard Statistics Basebook*; *Minerals Yearbook*; *Agricultural Statistics*; and *Foreign Commerce and Navigation of the United States*.

⁵ Careful spot checking indicates that the only effect of using annual data for prices would have been to narrow the extent of the fluctuations without changing the essential nature of the picture portrayed in the chart. As these data were developed in connection with a more comprehensive survey of price inflexibility, based on monthly price data, that the writer is making it did not seem worth while to recompute the data on an annual basis.

CHANGES IN PRICES AND PRODUCTION OF 264 COMMODITIES, 1929-1933



sharp curtailments in production while more flexible prices make possible greater stability in production. The crosses shown on the diagram represent the relationships for the ten industries upon which Dr. Means based his observations.

The data tend slightly downward to the right but within such broad limits as to negate the conclusion that there is a close inverse relationship between price inflexibility and stability of production. In this case the exception is the rule rather than proves the rule. If parallel lines are drawn through the upper and lower limits of Dr. Means's data, a channel covering about a 20 per cent range in price is established moving downward from left to right. Any given price change could be accompanied by a range of 32 per cent change in production and still remain within this channel. About 100 or 38 per cent of the 264 items falls within this area. If the channel is doubled to cover a 40 per cent range in prices, 172 items or 65 per cent of the total would fall within the area. In this latter case a given price change could be accompanied by a 63 per cent range in production change and still remain within the designated area. In other words a price decline of 30 per cent could be accompanied by a decline in production ranging from 90 per cent to 27 per cent—this area of possible change is certainly too wide to suggest a close relationship between prices and production. But despite the broad area covered, more than one-third of the total number of instances still remains outside the channel. The impossibility of indicating in advance the extent of a change in production merely on the basis of price change, without considering other factors, is evident from these data.

The composite picture consists of a number of sub-groups which did not always act in conformity with the total. Thus, for example, it should be noted that three-fourths of the raw materials (mainly farm products) recorded price declines in *excess* of 40 per cent and production decreases of *less* than 40 per cent. These items accounted for a large proportion of the cases located in the lower right-hand corner of the scatter. Semi-finished goods tended to conform to Means's theory when taken in the aggregate but an analysis of the composition of the total indicates that the data could be segmented into iron and steel products, non-ferrous metals and food and textile products, all of which displayed different characteristics and were located in different parts of the scatter. This tendency of similar products to be bunched within a certain area of the scatter suggests that factors other than price may have played an important rôle in determining the level of production.

The pattern formed by finished goods is particularly interesting as this group accounts for most of the more inflexible prices.⁶ Although there is

⁶ See also Don H. Humphrey, "Rigid Prices, 1890-1933," *Jour. of Pol. Econ.*, Oct., 1937, p. 656.

a slight downward tendency evident for finished goods, it is within such broad limits as to make valueless any generalization such as that made by Dr. Means. An analysis of the data by major groups indicates a tendency for products falling within a given group to exhibit similar relationships between price and production—again it must be repeated, however, that these groupings cover wide areas.⁷ Thus building data are bunched in the upper left-hand quarter of the scatter and fall within an oval (almost a circle) which moves upward slightly from left to right—a trend opposite from that to be expected according to Dr. Means. Chemical and drug products account for most of the data in the upper right-hand segment of the scatter and indicate no definite trend. As chemical products include many inflexible prices and hence should have—so runs the theory—declined markedly in output, this record represents a contradiction to the Means theory. The relatively small decline in production is probably accounted for by the strong upward secular trend prevalent in the industry. But this situation merely confirms the suggestion that factors other than prices frequently play an important rôle in determining the level of production. Whether output would have been higher in the absence of price inflexibility, is difficult to determine; but the facts do show that production was well maintained for many chemical products during the 1929-33 depression despite the existing inflexibility.

Other major classifications of commodities showed a similar tendency for concentration to that noted above. Thus the data in the extreme upper left-hand corner of the scatter were agricultural implements and finished goods in the lower right-hand corner were mainly food and textile products.

Wide variations in the relative changes in production for commodities whose prices acted similarly for the period further suggest that other factors than price flexibility were of primary importance. This statement does not deny that a decline in demand (reflected in changing production) during a depression may in some cases be caused by an inflexible price. Rather, that the extent of change in demand for many goods may not be as closely related to the level of prices as suggested by Dr. Means and others. Thus, commodities which remained unchanged in price from 1929 to 1933 were found to record declines in production ranging from less than 1 per cent to 93 per cent.

If class intervals of 10 per cent were selected for prices, a similar range in the changes in production could be indicated for every level of flexibility or inflexibility as is indicated in the second summary table:

⁷ For a more extensive discussion of the tendencies of different groups, see Jules Backman, "Price Flexibility and Changes in Production." *The Conference Board Bulletin*, vol. xiii, no. 5, Feb. 20, 1939. This bulletin also contains 9 scatter diagrams showing the relationship between prices and production for various classifications of commodities as well as a complete tabulation of the changes recorded by each of the commodities.

COMMODITIES SHOWING NO CHANGE IN PRICE, 1929-1933

<i>Commodity</i>	<i>Per cent change in production</i>
Drill, grain	-92.8
Plow, tractor	-92.8
Rake, self dump	-91.1
Sheller, corn	-91.0
Planter, corn	-73.8
Iron ore, Mesabi	-73.1
Carbonic acid	-61.4
Bone black, powdered	-57.5
Sulphur, crude	-41.7
Barytes, western	-39.4
Sulphuric acid 66°	-30.4
Arsenic, white, powdered	-25.9
Muriatic acid	-23.0
Nitric acid 42°	- 0.4

RANGE OF CHANGES IN PRODUCTION
WHICH ACCOMPANIED PRICE CHANGES FOR 264 SELECTED COMMODITIES
1929 TO 1933

<i>Per cent change in price</i>	<i>No. of instances</i>	<i>Range of changes in production</i>
+ 1.1 to + 10.7	4	+ 11.2 to - 54.3
0	15	- 0.4 to - 92.8
- 0.1 to - 10.0	16	+ 20.5 to - 96.2
- 10.1 to - 20.0	35	+ 108.5 to - 89.5
- 20.1 to - 30.0	29	+ 53.4 to - 91.5
- 30.1 to - 40.0	26	- 3.7 to - 84.1
- 40.1 to - 50.0	35	+ 50.0 to - 86.9
- 50.1 to - 60.0	40	+ 29.4 to - 81.5
- 60.1 to - 70.0	34	+ 75.9 to - 75.7
- 70.1 to - 80.0	25	+ 36.7 to - 55.0
- 80.1 to - 90.0	5	+ 14.8 to - 46.7
	264	

While price undoubtedly plays an important rôle, under these conditions, we must turn to other factors to explain adequately the widely divergent changes in production. Among these other factors may be mentioned: character of the market; durability of the product; capital goods *versus* consumers' goods; joint demand; stage of development of an industry; necessities *versus* luxury products and many others. It is in the study of these characteristics of a commodity rather than in the degree of price flexibility that an explanation is found for the changes in demand and hence in production.

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FIVE YEARS OF THE EXPORT-IMPORT BANK

The history of the Export-Import Bank to date has been characterized by hesitation and experimentation. This applies to its organization, the development of policy, and actual operations. The powers of the Bank are extensive but have not been fully exercised. Certain unique features distinguish it from other banking institutions. Most of the Bank's activities from 1934 to 1938 consisted of taking over business that would otherwise have been handled by other branches of the government. In recent months the Bank's operations appear to have been strongly influenced by considerations of foreign policy. Despite its name, the Export-Import Bank is to be regarded primarily as an agency for providing export credits. Such an institution is to be judged on the basis of both economic and political considerations. While, from an economic standpoint, the record of the Bank has not been impressive, it probably should be continued.

On February 12, 1939, the Export-Import Bank of Washington was five years old. These five years have been a period of experiment, and the actual accomplishments of the Bank have not been impressive. Plans as to organization, structure, and functions have been fundamentally modified since its inception; indeed, the precise functions of the Bank are even yet not clearly defined. In view of the time now elapsed and certain recent spectacular events in the life of the Bank, it is appropriate to review its history and attempt to appraise the part it has played and may yet be made to play.

Origin

The idea of establishing a system for providing foreign trade credits was a phase of the general program of encouraging economic recovery of which the National Industrial Recovery act, the Agricultural Adjustment act, and similar measures were also parts. The experience of other countries with export credit was canvassed and this evidence was used both to justify the attempt to provide similar facilities here and to guide in formulating plans.¹ At the time, it was expected that a separate bank would be created for each of a number of countries whose trade with the United States seemed, for one reason or another, to warrant such institutions. In addition, there was to be one bank for all other countries. Partly because this plan came to appear too grandiose, and partly because of fear that the establishment of individual banks for some countries and not for others would offend national pride, it was decided to modify this plan.

The First Export-Import Bank was incorporated in Washington, D.C., in February, 1934, to facilitate trade with Soviet Russia. It will be recalled that Russia had been recognized by the United States a short time before and that extravagant expectations were cherished as to the possible magnitude of that trade. A month later the Second Export-Import Bank was created to assist trade with Cuba and, by subsequent amendment,² with all

¹ Cf. Stella K. Margold, *Export Credit Insurance in Europe Today*. Senate Document No. 225, 73rd Congress, 2nd Session, Washington, 1934.

² June 30, 1934.

other countries except Russia. This bank was similar to the first with the exception that, despite its greater scope, its capital was only a quarter as large.³

With the breakdown of the soviet debt negotiations early in 1935, the trustees of the two Export-Import Banks, who were the same individuals, voted to liquidate the Second Bank and to permit the First Bank to take over its activities. The Second Bank was therefore closed on June 30, 1936; its preferred stock, amounting to \$2,500,000, was retired, and dividends on it were paid out of earnings. The sum of \$250,000 representing the cash originally received from the issuance of common stock was returned to the United States Treasury.⁴

Since the middle of 1936, then, there has been just one Export-Import Bank. Inasmuch as the two banks were the same or similar in all significant respects, they will be treated as one in the following discussion.

Administrative Provisions

The President's order creating the bank declared that it was necessary to aid in financing and to facilitate exports and imports and the exchange of commodities between the United States and other nations or the agencies or nationals thereof.⁵

Powers

Under the terms of its certificate of incorporation, the Export-Import Bank was empowered

to do a general banking business (except that of discount or circulation); to receive deposits; to purchase, sell and negotiate, with or without its endorsement or guarantee, notes, drafts, checks, bills of exchange, acceptances, including bankers' acceptances, cable transfers, and other evidences of indebtedness; to purchase and sell securities, including obligations of the United States or of any State thereof, but not including the purchase with its funds of any stock in any other corporation; to accept bills or drafts drawn upon it; to issue letters of credit; to purchase and sell coin, bullion, and exchange; to borrow and to lend money; and to do and to perform the necessary functions permitted by law to be done or performed in conducting said enterprise or business.⁶

The fact that the banking laws of the District of Columbia did not permit the discounting of obligations seriously limited the possible usefulness

³ Both banks were created by act of the President.—Executive Orders no. 6581 and no. 6638, dated February 2, and March 9, 1934, respectively, issued under the authority of the National Industrial Recovery act of June 16, 1933. Both executive orders were ratified by Congress on January 31, 1935.

⁴ *Annual Report of Export-Import Bank for 1936*, Washington, D.C., December 31, 1936.

⁵ Executive Order no. 6581. The phrase beginning "exchange of commodities" apparently refers to international barter transactions.

⁶ District of Columbia, Certificate of Incorporation of Export-Import Bank of Washington, no. 22430, February 8, 1934.

of the Bank. This situation was rectified by Congress in January, 1935, with the grant of specific powers to discount and, subject to the approval of the Secretary of the Treasury, to rediscount.⁷

Finally, the Export-Import Bank is subject to examination by the Comptroller of the Currency and to many of the regulations governing national banks.

Capitalization

At the end of 1938 the capital of the Export-Import Bank, issued and outstanding, consisted of 45,000 shares of preferred stock having a par value of \$1,000 each and 10,000 shares of common stock with a par value of \$100 each, the total capitalization amounting to \$46,000,000. All of the preferred stock is owned by the Reconstruction Finance Corporation. The common stock is held jointly by the Secretaries of State and Commerce for the benefit and use of the United States. Eleven shares, although owned by the United States, are issued in the names of the trustees of the Bank.⁸ Holders of both preferred and common stock possess voting privileges.

Dividends of three per cent per annum on the preferred stock are cumulative and must be paid before any dividends are paid on the common stock.⁹ With the approval of the Comptroller of the Currency, the Bank may redeem the whole or any part of the preferred stock at \$1,000 per share plus accumulated and unpaid dividends. Should the Bank be temporarily in possession of excess funds, such amounts are deposited with the Reconstruction Finance Corporation and interest on them is applied against dividends.¹⁰

The preferred stock amounted originally to 10,000 shares with a par value of \$1,000 each. Owing to the expansion of the Bank's activities, it was deemed advisable to double this amount in 1935. In March, 1937, the Reconstruction Finance Corporation, in anticipation of a further increase in business, agreed to purchase additional preferred stock in the amount of \$25,000,000. This additional stock was issued during 1938.

Officers

The Bank is governed by a board of trustees elected annually by the stockholders, that is, by the Reconstruction Finance Corporation, the Secretaries of State and Commerce, and the trustees themselves. The membership of

⁷ Sec. 9, Public no. 1, 74th Congress (S. 1175), approved January 31, 1935.

⁸ Executive Order no. 6581, February 2, 1934, and Executive Order no. 6601-A, February 14, 1934.

⁹ The dividend rate was originally fixed at five per cent on preferred stock but was reduced to three per cent in accordance with the terms of an agreement between the Export-Import Bank and the R.F.C. concluded in March, 1938.

¹⁰ This is an unusual feature of banking as carried on by the Bank. It signifies that the Bank is always assured of a return on available funds.

this board was originally set at five but was subsequently increased to eleven where it now stands.¹¹ In addition to the president of the Bank, the board includes representatives of the following government divisions: State, 2; Commerce, 2; Treasury, 1; Agriculture, 1; Reconstruction Finance Corporation, 4.¹² With the consent of the President of the United States, membership may at any time be raised to fifteen or reduced to five.

Although the institution is under the general supervision of the board of trustees, routine activities are administered by an executive committee consisting of six trustees. The Bank is managed by a president, vice-president, secretary, treasurer and general counsel, all of whom are elected by the board of trustees.

Operations

General Provisions

An exporter or importer may apply to the Bank for assistance either directly or through a commercial bank. In case a commercial bank acts as the intermediary it must be prepared to cooperate in making required investigations and, if necessary, to undertake collections for the Bank; moreover, it may be allowed to participate in the loan.

The Bank undertakes to grant short-term, intermediate, and long-term credit. The first is defined as maturing in less than 180 days, the second in from 180 days to twelve months, and long-term credit as running from one to five years or, in exceptional cases, even longer. It was originally provided that the minimum charge for long-term credit should be one per cent above the rate charged the Bank by the Reconstruction Finance Corporation, and the minimum charge for intermediate credit three-quarters of one per cent above that rate. Determination of the rate is now left to the discretion of the Bank's officers. The rate charged on short-term credits is not stipulated.

The Bank has not engaged in the insurance of export credits. This constitutes one of the principal differences between this bank and similar institutions in foreign countries.

The Export-Import Bank, even though authorized to do so, holds no deposits. In this and other ways it seeks to avoid the charge of competing with existing banking institutions. Furthermore, it customarily follows the procedure of appointing the exporter's own bank as its agent in particular transactions. As agent the local bank is authorized to advance loans, effect the actual discounting of notes, and handle the routine correspondence and shipping details of the transaction. Furthermore, banks and other financial institutions are given the opportunity to participate, whenever possible, in the commitments undertaken by the Export-Import Bank. As a result of

¹¹ Certificate of Incorporation as amended, April 3, 1936.

¹² *Annual Report of Export-Import Bank for 1937*, Washington, D.C., January 10, 1938.

these policies, the scope of the Bank's activities is distinctly more circumscribed than the extent of its legal powers might lead one to expect.

As was mentioned previously, the Bank is, in general, subject to the laws governing national banks. This extends to requirements for the maintenance of deposits. The necessity of holding reserves is avoided, however, by the very simple expedient of not accepting deposits. When credits are granted the proceeds are not placed to the credit of the borrower as is the case in ordinary commercial bank operations. Instead, the procedure is essentially similar to the establishment of a line of credit; the actual transfer is effected only at the time the funds are utilized. In effect, the Export-Import Bank holds funds with the Reconstruction Finance Corporation and transfers them to its customers as demanded.

The Bank is thus in a unique position. It is freed of the necessity of holding non-earning assets in the form of reserves and is always assured of being able to place idle funds with the R.F.C. where they bear interest. On the other hand, so long as present policies are followed it will not be able to acquire assets by the simple expedient of expanding its own liabilities as commercial banks are able, upon occasion, to do.

Fields of Activity

The major functions of the institution are threefold: namely, (1) the extension of intermediate credits in connection with the exportation of agricultural products; (2) the granting of long-term credits to further the exportation of durable goods; and, (3) assistance to private firms hampered by foreign exchange control restrictions.

(1) Extension of Agricultural Credits

Intermediate credits granted by the Bank to further the exportation of agricultural products have dealt chiefly with two commodities, cotton and tobacco. The total value of shipments given aid up to the end of 1938 was approximately \$7,000,000. A considerable quantity of tobacco was exported to the Spanish Government Monopoly, while cotton was sent principally to Italy, Czechoslovakia, Germany, Latvia, and Poland.

In general, such operations are handled as follows: the foreign importer issues a 90-day note which, under special circumstances, may be extended for an additional three months;¹³ the importer's bank guarantees this note and obtains from the appropriate exchange control authorities written assurance that the necessary amount of dollar exchange will be made available at the time the note matures; the note is then discounted for the exporter by the Export-Import Bank at a rate averaging around four per cent. The

¹³ It is reported that commercial banks have been unwilling to finance cotton exports when payment cannot positively be assured within 90 days.

exporters' bank acts as the agent of the Export-Import Bank in such transactions and receives a fee for its services.

(2) Long-Term Credits for Durable Goods

The second, and what may develop into the most important, activity of the Bank concerns the extension of long-term loans covering the exportation of durable goods. Prior to 1930 the United States was one of the leading exporters of heavy machinery and railway rolling stock and equipment, with Latin America and the Far East the principal markets. Between 1930 and 1934 foreign orders for manufactures of this type were greatly reduced. With an improvement in world conditions, however, a gradual increase in the foreign demand for durable goods occurred. American firms maintained that they were unable to share, to any appreciable extent, in this increased demand because they were unable to extend such long-term credits as were being granted by their European competitors. Their inability to extend suitable credit was attributed to the unwillingness of American banks, because of the unsettled state of the exchanges and general economic conditions, to share in the risk involved in such financial operations. Owing to the assistance of governmentally fostered export credit agencies, European manufacturers were in a position to grant the terms sought by foreign purchasers.

By agreeing to buy 50 per cent or more of the one to five-year obligations issued by the foreign enterprise the Export-Import Bank makes it possible for the American exporter of durable goods to bid for such business on more equal terms. In addition, the Bank does not require the exporter to be responsible for the total loss in the event that the purchaser is unable to make payments. In practice, the risk involved is usually shared jointly by the Bank and the American shipper, although in certain instances as much as 70 per cent of the Bank's obligation have been assumed without recourse to the exporter.

While transactions of this type would appear to involve considerable risk, certain qualifying circumstances should be noted. Before an American exporter who desires to avail himself of the credit facilities of the Bank submits a bid to a prospective customer, the Bank carefully examines the proposal. Consideration is given to such questions as the financial standing of the prospective borrower; the usefulness of the proposed loan from the standpoint of domestic economy in the United States; whether participation would further friendly relations with the foreign country concerned; whether it would have the effect of encouraging continued default on obligations already held by Americans; whether participation would increase appreciably the strain on the foreign exchange position of the importing country and therefore merely result in a delay in payments on American

merchandise already sold; and whether the extension of credit would tend to develop American business in usual trade channels.¹⁴ Again, the foreign security for the proposed credit, methods of payment, and assurances as to the availability of dollar exchange are subjected to careful scrutiny.¹⁵ Finally, if the purchaser of the durable goods intends to pay for them by issuing a series of notes of successive maturities, the Bank insists that its share of the notes maturing earlier be at least as great as that of the exporter.

In the first four and a half years of the Bank's existence, total credit transactions by the Bank to assist American exporters of durable goods did not exceed \$3,000,000. Such operations dealt chiefly with the sale of railroad locomotives and equipment to Latin American countries and China, although other types of industrial machinery such as tractors were also involved. Credit terms usually extended from two to five years, and interest rates averaged between five per cent and seven per cent per annum. As in the case of intermediate agricultural credits, a majority of the transactions of this type have been handled through the borrower's own bank acting as agent for the Export-Import Bank.

Announcement was made in December, 1938, of the extension of a credit of \$10,000,000 to the International Telephone and Telegraph Company to facilitate expansion of activities in South America. The transaction is noteworthy, first, as the only operation undertaken by the Bank which was not directly related to trade and, second, for the fact that a portion of the credit is to run for ten years. The yield on this loan is approximately five and a quarter per cent annually.¹⁶

In the summer of 1938 the Bank entered into a commitment rather of the nature of a direct loan to a foreign State than of a credit transaction on behalf of an American firm. An American engineering company concluded a contract with the Haitian government for the construction of roads and similar public works, the company to supply all materials and equipment other than those available in Haiti. Payments for such merchandise were to be made through the issuance of a series of five per cent notes secured by the credit of the Haitian government. The Export-Import Bank agreed to purchase these notes from the American concern up to a limit of \$5,000,000, provided all machinery and construction materials were bought in the United States.¹⁷

It is generally believed that this transaction was motivated by a desire

¹⁴ Speech delivered May 26, 1938, by Warren Lee Pierson, president of the Export-Import Bank of Washington, before the Foreign Trade Association of the San Francisco Chamber of Commerce (mimeographed).

¹⁵ General Policy Statement of the Export-Import Bank of Washington, June 15, 1938.

¹⁶ *The Commercial and Financial Chronicle*, December 17, 1938, p. 3765.

¹⁷ *The New York Times*, July 24, 1938.

on the part of the United States government to prevent the construction credit from being supplied by Germany. In view of the importance to the Haitian authorities of the good-will of the United States government, it is not expected that any difficulty will arise in the Bank's securing payment. The transaction is significant, however, as a turning point in the affairs of the Bank: it has been followed by other transactions in which political considerations appear to have been important.

Much publicity has been given to the loan of \$25,000,000 to China, announced in December, 1938. This grant was actually made to a corporation domiciled in this country, the Universal Trading Corporation of New York, but this is presumably an agency of the Chinese government and the loan was guaranteed by the Bank of China. The purpose of the advance was nominally to finance the exportation of American agricultural and manufactured products to China and the importation into this country of Chinese wood oil.¹⁸ It was generally interpreted, both here and abroad, as constituting official support of the Chinese government in the conflict with Japan. Mr. Jesse Jones reported to Congress that the loan agreement provided that the loan would not be used in connection with the export of war materials.¹⁹

(3) Assistance to Firms Hampered by Exchange Control

The third major field of the Bank's activities, assistance to American firms hampered by foreign exchange control restrictions, has proved less important than was expected. By the terms of the Reciprocal Trade Agreement between the United States and Brazil the latter agreed to take steps to release sums owed to American exporters but "frozen" as a result of exchange restrictions.²⁰ Accordingly, an arrangement was made in February, 1936, between the Bank of Brazil and American exporters to liquidate, by monthly payments running nearly five years, all exchange blocked before February, 1935.²¹ About \$30,000,000, comprising all claims in excess of \$25,000 each, was included in this agreement.²² Payments were to be made in the form of dollar notes of varying maturities, issued by the Bank of Brazil and guaranteed by the Brazilian government, the average rate on such notes being four per cent per annum. The Export-Import Bank agreed to discount these notes at four per cent up to the amount of

¹⁸ *The Commercial and Financial Chronicle*, December 17, 1938, p. 3690.

¹⁹ Department of State, Radio Bulletin no. 33, February 9, 1939, p. 3.

²⁰ Reciprocal Trade Agreement between the United States of America and the United States of Brazil, signed at Washington, D.C., February 2, 1935, proclaimed at Washington December 2, 1935.

²¹ Agreement signed on February 21, 1936, between the Brazilian Ambassador to the United States and the President of the National Foreign Trade Council, *The Commercial and Financial Chronicle*, February 29, 1936, p. 1373.

²² Claims of less than \$25,000 each were paid immediately by the Bank of Brazil.

\$27,750,000, provided the holder could prove to the satisfaction of the Bank that the sums obtained by such discounting would enable the creditor to carry on or increase his export business. Recourse against the American exporter for the full amount of the note was retained by the Bank. Because of the fairly high discount rate and the recourse provision, most of these notes have been kept by the exporters, slightly less than \$2,000,000 worth having been discounted.

In March, 1939, a credit of \$19,200,000 to the Banco do Brazil was authorized to assist the government of Brazil in discontinuing exchange control in transactions between Brazil and the United States.²³

(4) *Special Fields*

In addition to the three main categories of operations just discussed, the Bank has operated in three special fields, the extension of coinage loans to Cuba, the handling of foreign commercial obligations payable to various agencies of the United States government, and the provision of credit for small traders. Five loans have been made to the Republic of Cuba to finance the purchase in the United States of silver bullion and its minting here into standard Cuban pesos. Such loans are essentially short-term in character, rarely exceeding 90 days in length, and are made at the rate of three and three-quarters per cent plus a commission of three dollars per 1,000 pesos. Over 57 million pesos have thus far been delivered to the Cuban government against which the Bank has advanced \$24,000,000. This entire amount has been repaid with full interest.²⁴

On the assumption that it would be advisable to concentrate in the hands of one institution the foreign commercial obligations owing to government agencies, the Export-Import Bank acquired in June, 1936, the outstanding notes of the Chinese government issued against the Grain Stabilization Corporation loan of 1931 and the R.F.C. loan of 1932 to finance purchases of wheat and flour. The total of such notes when the Bank took them over amounted to approximately \$13,000,000.²⁵ Despite the financial strain of war, the Chinese authorities have continued to meet payments on maturing notes of these two loans.

The bank also acts as a financial agent in the collection of notes issued by the Deutsche Getreide Handelsgesellschaft, m.b.H., in connection with the purchase of wheat from the Grain Stabilization Corporation in 1931. These obligations, which are guaranteed by the German government, have been regularly met as they fell due.

Finally, the Bank has undertaken to establish lines of credit up to \$10,000 each to less well-known traders. While this part of the Bank's

²³ Department of State, Press Release no. 84, March 9, 1939, Appendix B.

²⁴ Cf. *Annual Reports of Export-Import Bank*, 1936 to 1938.

²⁵ *The New York Times*, June 21, 1936.

business has not loomed large, experience with it is reported to have been very successful.²⁶

Extent of Activities

The following table summarizes the total volume of business transacted by the Bank from the date of its establishment until the end of 1938.

Except for a sharp decline in 1937—which did not, however, extend to repayments—the business of the Bank has shown a steady upward trend. The fact that a considerable proportion of the commitments in 1938 were made late in the year explains the fact that the rise in disbursements failed

SUMMARY OF ACTIVITIES, 1934-1938¹

Year	Authorizations	Disbursements	Repayments	Net earnings
1934	\$11,466,137	\$ 3,774,864	\$ 3,774,725	(a)
1935	45,658,010	10,255,164	5,983,876	(a)
1936	55,603,867	21,113,216	7,812,015	\$ 597,258
1937	21,327,824	7,690,316	7,891,790	853,910
1938	74,808,092	18,602,974	9,772,940	1,081,346
	208,863,930	61,436,534	35,235,346	
Total cancellations				\$101,260,888
Amount due				26,201,188
Active commitments, December 31, 1938				46,165,508
(a) Not available.				

¹ *Annual Reports of the Export-Import Bank, 1936 to 1938.*

to keep pace with the increase in authorizations; this gap will doubtless be filled during the current year. Experience has shown that more than half of the credits granted are never utilized. Cancellations are the result principally of the funds being obtained from private sources, or of the funds applied for not being required when a particular venture is not carried through.

During the period covered in the above table, commitments were made by the Bank in connection with trade with thirty-one foreign countries, including Canada, thirteen countries in Latin America, eleven in Europe, and six in Asia. Despite the fact that the Export-Import Bank originated in a desire to facilitate trade with Russia, no credits have ever been authorized in connection with Russian trade. In general, the financially stronger countries, such as Great Britain, France, Sweden, and Belgium, have not figured in the business of the Bank, largely, no doubt, because the financing of trade with these countries presents fewer difficulties.

Under the Act passed early in 1939, extending the life of the Bank to June 30, 1941, a limit of \$100,000,000 was placed on the volume of

²⁶ *Annual Report of Export-Import Bank, 1938, p. 3.*

credits that may be outstanding at any time. Although this figure is considerably in excess of any that has thus far been attained, the possible extent of the Bank's activities will be rather narrowly circumscribed as long as this restriction remains in force.

Development of Policy

Even after five years' experience it is impossible to formulate in any clear fashion precisely what the policy of the Export-Import Bank has been or is. The first president was Mr. George N. Peek, who also occupied the position of Adviser to the President on Foreign Trade. He apparently subscribed to the view that, whereas a debtor country may expect exports to flow abroad of their own accord, a creditor country must stimulate exports artificially. He desired to meet on their own ground the governments, such as that of Germany, which participate directly in the conduct of foreign trade. While he declared that the Bank should not "subsidize exports at the expense of the taxpayers,"²⁷ he maintained that our foreign trade interests must receive assistance similar to that given foreign competitors "who are being actively and heavily backed by their governments."²⁸ This point of view reached its extreme in the declaration that we should have a two-price system for some commodities, one for domestic consumption and another for foreign markets, in order to meet competition in particular countries.²⁹

Mr. Peek strongly favored entering into barter agreements and would have made their administration an important part of the functions of the Bank. The refusal of the State Department to tolerate a barter transaction involving the export of raw cotton to Germany admittedly influenced Mr. Peek's decision to resign his position as head of the Bank. Thereafter, the Bank, under Warren Lee Pierson, pursued an uneventful career, taking what came its way with little attempt to expand its scope. It has become, in effect, a rather inconspicuous adjunct of the State Department. The quiet of the Bank's existence was broken, however, by the announcement of the \$25,000,000 loan to China at the end of 1938. This appears to presage a more eventful, but not more independent, phase of its existence.

On the basis of experience to date, the following points may be offered as constituting the main threads of Bank policy.

- (a) Avoidance of competition with private sources of foreign trade credit.
- (b) Non-participation in import trade financing. This cannot be said to have been based upon intention. Officers of the Bank maintain that the reason for its failure to take more than a negligible part in such transactions lies in the willingness of private banking institutions to extend all the credit that is needed in this field.

²⁷ Press Release no. 6, Export-Import Bank, October 17, 1934, p. 12.

²⁸ *Ibid.*

²⁹ It was added that this could not be called dumping if the transaction had the approval of the government in the country receiving the goods.—Press Release no. 9, November 20, 1934, p. 6.

- (c) Avoidance of conflict with the State Department's aim of bringing about more liberal trade policies. But for this rule the Bank might have greatly extended its activities by engaging in operations involving barter arrangements and exchange clearing.

Mention should be made of two other alleged principles of the Bank. The Bank announced early in its career that it would not provide credit for the purpose of thawing out frozen credits. Both of the Brazilian agreements relating to obligations impounded by exchange control³⁰ would seem to be departures from this rule. It was also held that the Bank should not aid in financing the export of commodities that "look like munitions." A proposal to assist sales of cotton to Italy at the time of the Abyssinian affair was first challenged and then refused on this ground.³¹

Political Aspects

The Bank is clearly in a strategic position to serve domestic and foreign politics. If Mr. Peek's wishes had been considered, it might easily have been used to subsidize agricultural exports. It could conceivably be used to give assistance in this way to any group which the party in power saw fit to aid. Likewise it could as easily be employed to further political aims of an external character.³² It has been alleged, as was previously noted, that the credit of \$5,000,000 to Haiti in 1938 was granted to prevent that country from becoming involved in financial commitments with Germany. The much-publicized grant of a \$25,000,000 credit to China at the end of 1938 serves to illustrate, if not what has been done, at least what may be done to adapt the Bank to use as an instrument of foreign policy.

Summary of Accomplishments

The total volume of business transacted by the Export-Import Bank up to the end of 1938 was under \$62,000,000. This compares with a capital at the end of the period of \$46,000,000 and of \$21,000,000 during the larger part of the life of the Bank. Even when it is recalled that the period closed with the Bank's business expanding sharply, the volume of business transacted to date is far from impressive. It becomes still less impressive when individual transactions are examined.

The largest group of operations carried out by the Bank were the coinage loans to Cuba, amounting to \$24,000,000. While the Bank may, perhaps, be assumed to have performed a useful function in providing these funds, the engagements underlying the credits were in no way dependent upon the existence of the Bank. On several previous occasions the Cuban Government had effected similar operations by direct negotiation between the

³⁰ *Supra*.

³¹ *The New York Times*, August 8 and 9, 1935. More recent developments lead one to suspect that this rule has come to be interpreted with considerable latitude.

³² Such measures could be applied through either imports or exports or through non-trade transactions.

Cuban Treasury and the United States Mint, and probably would have been able to do so in these instances.

A second group of transactions consisted of taking over obligations payable to other agencies of the federal government. Notes of the Chinese government growing out of the sale of American agricultural products amounted alone to over \$13,000,000. There may have been some administrative advantage in concentrating these claims in one place, but again this represented business turned over to the Bank, rather than business made possible by the existence of the Bank.

It seems probable that not over a quarter, and perhaps considerably less, of the business done by the Bank to the end of 1938 was of the type contemplated by the organizers of the Bank. The Export-Import Bank has pretty well avoided displacing private enterprise; but it is somewhat anomalous to find that much the largest part of the business done by the Bank during nearly five years of its existence consisted of displacing other branches of the government, and in no way represented an increase in the total of business done. Furthermore, it is probable that some, at least, of the remaining transactions in which the Bank figured would have occurred even in the absence of the Bank. On the most favorable assumptions, however, and with due allowance for the fact that progress was necessarily slow at the start, it would be difficult indeed to justify the establishment of the Bank on the basis of what it has accomplished thus far. This is not to suggest that the Export-Import Bank should not have been created or that it should now be abandoned, but it signifies that the case for its continuance must rest upon other considerations than its record to date.

The Place of an Export Credit Institution

Export credits may be regarded from two different points of view; they may be judged on purely economic grounds or they may be treated as a means of accomplishing certain ends not purely economic in character. From the latter standpoint they are essentially similar to other forms of governmental subsidy and are to be judged accordingly. The justification for an institution such as the Export-Import Bank, therefore, turns on the answers to two questions. In the first place, is it an enterprise, like the operation of the mails, which can be administered most effectively and economically only as a governmental venture? In the second place, is it of sufficient importance and is the competitive situation in foreign trade and finance such as to justify the government in entering this field even though the enterprise cannot be expected to pay its way on a simple dollar-and-cents basis?

Export Credits on a Business Basis

A number of considerations make it appear probable that the provision of export credits can be conducted more economically by the government,

assuming efficient administration, than by private enterprise.³³ An agency of the government can ordinarily secure its funds at lower rates of interest than a private business corporation.³⁴ In a society still reasonably individualistic this advantage must not be allowed to weigh too heavily, since it would be equally valid as a reason for the government's entering many other lines of domestic enterprise. Second, and more important, the government has extensive international connections and, through its consuls and commercial attachés, can secure accurate information more cheaply than can private businesses acting independently. Third, the government is probably subject to less risk since it is in a position to bring pressure upon foreign debtors, directly or through their governments, more effectively than individuals could do. Finally, the more international credit operations are concentrated in the hands of a single organization, the more efficient an enterprise of this sort could be, since this would reduce to a minimum the duplication of facilities. It would be simpler to centralize business in an agency of the government than in a private institution.

As an alternative, of course, certain of these facilities—collection of information and the bringing of pressure—could be placed at the disposal of privately operated export credit organizations. This might mean singling out certain business-men for special favors; while this is not without precedent it is open to obvious objections. Moreover, it would be likely to lead to the same sort of international friction that has arisen in cases where governments have interfered to assist their nationals in the collection of debts. Perhaps the friction would be as great if a government were acting for itself rather than for certain of its nationals, but this is doubtful.

Foreign countries call similar agencies export credit institutions. We profess that ours is for the extension of credits on imports as well. In practice, however, the Export-Import Bank, despite its name, is almost exclusively an export credit institution, and it would seem that this must more or less inevitably be the case. Since imports are paid for by businessmen within the country, it is to be expected that, in a country such as the United States, a transaction that is deserving of credit can be financed through ordinary banking channels. Governmental encouragement of exports may be expected, also, to arouse less opposition on the part of the public than would the facilitation of imports.

How important export credits on a purely business basis could become,

³³ Cf. Elia M. Shenkman, *Insurance against Credit Risks*. London, P. S. King, 1935, pp. 162-76, 343-44, and *passim*. This book contains the best general treatment in English on the subject of export credits.

³⁴ This statement requires some qualification. As a consequence of default on interest and varying degrees of loss of principal, a substantial volume of borrowing is effected at what proves to have been a zero or negative rate of interest. This fact would have to be allowed for in any calculation of the net cost of borrowing on private account. It is impossible to state whether, over the long term, the net rate paid on private borrowing would be higher or lower than the rate paid on government borrowing.

it is impossible to say. The field of intermediate credit—the bulk of export credits are ordinarily of this type—is one that private enterprise has been notoriously laggard in entering. It may be that it is desirable for the government to assist in developing this business for some of the same reasons that led it to facilitate the granting of intermediate credit to agriculture. Failure of the business to develop under private auspices casts doubt, however, on the view that there is an important need for export credits. This failure cannot be regarded as conclusive evidence of absence of need for the reason noted—namely, that it might conceivably be economic as a governmental, though not as a private, enterprise. It is significant that other countries have found the granting of export credit a reasonably profitable business except during periods of depression.

Export Credits as a Political Instrument

When viewed purely as an instrument of commercial policy the question of whether export credits pay their way is not of primary concern. They are then to be regarded chiefly as a device for encouraging selected exports and are essentially similar to a subsidy. It is probable that in most countries of the world the provision of export credits should now be viewed in this light. To the extent that such is the case, export credits are open to the objections, and are subject to the defenses that may be advanced in the case of other forms of subsidy.

It is entirely possible that competition in the granting of export credit may lead to the same abuses that have accompanied the granting of aid to shipping or straight export subsidies. The element of novelty has great tactical value in the field of commercial policy. The relative newness of this particular device will probably allow it to be carried to greater lengths than if we were more familiar with it. The fact that other countries are employing this and other forms of export aid will seem to be a reason why we should also make use of it. It is quite possible that we are embarked upon another period of competitive subsidizing of exports and that these subsidies will be partially concealed under the guise of export credits.

Even the casual student of international economic affairs has come to accept the view that a country is unwise to compete with other countries in the subsidized dumping of its exports abroad. We are likely to have in the near future a testing of the depth of this conviction. It is superficially plausible to assume that the centralization of foreign trade in the hands of foreign governments compels our own government to play a more positive part in promoting exports. It is important to recognize, however, that the provision of export credit on other than a business basis raises the same issue as is involved in the granting of simple export subsidies.³⁵

³⁵ Not that this disposes of the issue. Many of the same considerations that justify measures to prevent temporary, bounty-fed, dumping within a country may be used to defend measures to meet such dumping in third countries.

Export Credits and International Capital Movements

The Royal Institute of International Affairs maintains that one advantage of export credits is that their use happily combines the granting of foreign credits with goods movements which make easy the transfer of the credits.³⁶ By removing the necessity of effecting adjustments in other items, any strain on the international balance of payments is thus presumably avoided. Despite the weight of authority behind this contention, it is to be accepted only with reservations. The argument is suggestive of the defense of "tying clauses" in foreign loan contracts. To the extent that there is any direct connection, however informal, between a loan and any particular use of the proceeds, there is a presumption against it. The most economic use of the proceeds of a loan is possible only if the borrower may dispose of them as he pleases and if adjustment is free over the entire range of items in the balance of payments. There must be a "natural" selection through the price and exchange mechanism if the transfer of capital is to be regarded as ideal from an economic standpoint. When a credit and the use to which it is put are tied together in the manner suggested, a strong probability exists that one or the other, or both, are exchanged at what is not, properly speaking, an economic price.

The element of novelty is not only highly important in international commercial policies but also has an important bearing on the question of international capital movements. Capital export on long term is now under a considerable cloud as a result of the unfortunate events of recent years. Experience with export credits is much more favorable, partly, no doubt, because the time has been too short to allow a thorough testing. As a result, it is probably feasible for a considerably greater volume of capital export to take place in this manner than would be likely to move freely in the form of long-term investments. As compared with short-term capital movements, moreover, export credits are less volatile and hence less capable of creating sudden disturbances in balances of payments.³⁷

The present discussion of the Export-Import Bank has, of necessity, been chiefly descriptive and historical. For reasons that are not purely historical it seems probable that the Bank can be a useful factor in the machinery of international trade and finance. Obvious dangers are inherent in an institution of this sort, and a straight course must be driven between the twin hazards of ineffectuality and abuse.

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³⁶ *The Problem of International Investment*. London, Oxford University Press, 1937, pp. 51 and 89.

³⁷ It may be observed in passing that the Export-Import Bank makes it possible to avoid the restrictions on capital export imposed by the Johnson act, since governmental agencies are exempt from the provisions of this law.

IS THE AMERICAN ECONOMY CONTRACTING?

Paper presented at a Round Table Conference of the American Economic Association at Detroit, Michigan, December 28, 1938.

Expansion or contraction of our economy is defined in terms of real national income, either total or per capita. The ratio of the real national income actually produced to the national income which could be produced, under conditions of a given state of technical knowledge and of organizational ability of the producers, is the organizational efficiency of the economy. A survey of the statistical material indicates that while the real national income was increasing during the period 1919-1929 at an approximate annual rate of 4 per cent, it was stagnant from 1929-1937 and per capita real income was probably slightly decreasing. Compared with pre-war times and the pre-depression period, the organizational efficiency of the American economy declined heavily in the period 1929-1937. In 1937 the national income produced with the existing capital equipment could have been 19-24 per cent higher if it were not for the wastage through unemployment. This estimate does not take into account the effects of the stoppage of net capital formation during the depression.

The view is widely held that the American economy has lost its momentum of expansion and reached a stage of more or less permanent stagnation. According to one interpretation, this is the result of a general world-wide decline of capitalism, while another interpretation treats it as a more local phenomenon—namely, as the inevitable result of the disappearance of the frontier. Both arguments, however, are related to each other. For the unprecedented economic expansion in the nineteenth and in the first quarter of the twentieth century was strictly connected with the existence of a world-wide frontier in Africa, in Asia, in Australia, and in America which provided the investment opportunities necessary for such enormous rate of economic expansion. Thus the disappearance of the frontier in the United States is but a special case of a process characteristic for capitalism at large.

The purpose of all economic activity is the satisfaction of human wants. These wants are satisfied out of the flow of goods and services produced by the economic system. If, however, the economic system is to retain its income-yielding capacity, allowance has to be made for maintenance, depreciation and obsolescence of the capital equipment. What is left of the flow of services produced after this allowance has been made is the income of the community out of which human wants can be satisfied. The net national income, therefore, measures the want-satisfying achievement of the economic system and we shall say that the economy is expanding or contracting according to whether the net national income is increasing or decreasing.

But in a society with increasing population, a constant national income is not sufficient to secure the same level of satisfaction of wants for each member of the community. The national income must keep pace with the increase of the population so as to avoid a decrease in per capita income. We shall say, therefore, that the economy is expanding or contracting *relatively*

to the population according as to whether the per capita income is increasing or decreasing.

Besides the increase (or decrease) of the total and of the per capita national income there has to be taken into consideration the rate of its increase (or decrease). We shall call it the *rate of economic expansion*. While the net national income may be expanding, the rate of expansion may be slower.

Under conditions of a given state of technical knowledge and of organizational ability of the producers, the income-yielding (*i.e.*, want-satisfying) capacity of the economy is limited by the productive resources available.

TABLE I

Year	National income produced ¹		B.L.S. cost of living index ¹	National income produced in 1929 prices ¹ index
	(In millions)	Index		
	(1)	(2)	(3)	(4)
1929	\$80,757	100.0	100.0	100.0
1930	67,969	84.2	97.5	84.4
1931	53,499	66.2	89.1	74.3
1932	39,545	49.0	80.2	61.1
1933	41,813	51.8	76.2	68.0
1934	49,575	61.4	79.0	77.7
1935	54,955	68.0	81.1	83.8
1936	63,799	79.0	82.1	98.2
1937	69,000 ²	85.5 ³	84.7 ³	100.9

¹ Source: *Statistical Abstract of the United States, 1937*, table 336, p. 297. The national income figures are those of the Department of Commerce; the cost of living index is that of the Bureau of Labor Statistics.

² Column (2) divided by column (3).

³ Column (1) gives provisional approximate figures as quoted in *Survey of Current Business*, March, 1928, p. 5. Columns (2) and (3) are indices calculated on the basis of the figure in column (1).

But the actual national income may be below this limit because of failure to utilize fully the productive resources, particularly the employment-seeking population. The ratio of the national income actually produced to the income-yielding capacity of the economy, therefore, measures the *organizational efficiency* of the economic system.

Changes in the organizational efficiency of the economic system are strictly connected with the rate of economic expansion. Although the economy is expanding, the rate of expansion may be insufficient to employ all productive resources. This may happen when the efficiency of production increases so that the same output may be produced with the aid of a smaller quantity of labor and other resources. To keep them fully employed it is necessary that the increase of output be sufficient to compensate for the decline in demand for productive resources per unit of output.

From the organizational efficiency of the economic system, *i.e.*, from its

ability to employ its resources, we may distinguish its *social efficiency* or the ability to distribute equally the income produced. However, a low organizational efficiency of the economic system results also in a low social efficiency. For if unemployment is large, even though the economy be expanding, a part of the members of the community is excluded from sharing in the fruits of expansion, or even worse, the economic progress of those who are employed is obtained at the expense of those who, becoming unemployed, suffer a decrease of their income and, therefore, a decrease of their ability to satisfy their wants.

The first subject of our inquiry is the variations in national income produced. This is given in Table I which is based on the estimates of the United States Department of Commerce.

TABLE II

Year	National income deflated by special index ¹ (1929=100)	National income deflated by cost of living index (1929=100) ²
	(1)	(2)
1930	85.6	85.5
1931	73.3	74.0
1932	60.3	60.6
1933	66.5	67.7
1934	72.5	75.7
1935	78.1	80.6

¹ Source: *Technological Trends and National Policy*, p. 69. The index is shifted to the basis 1929=100. It is obtained by deflating the U. S. Department of Commerce estimates of the national income as published in *Survey of Current Business*, July, 1936, p. 18 (or in *National Income in the United States, 1929-1935* (U. S. Dept. of Commerce, table 1, p. 22) by Professor Kuznets' combined index of the cost of living and the prices of investment goods.

² The same estimates of the national income deflated by the B.L.S. cost of living index.

The figures in column (1), however, reflect not only the changes in the flow of goods and services available after deduction for maintenance, depreciation and obsolescence has been made, but also the changes in prices. They have, therefore, to be corrected for variations in the price level in order to obtain the *real income*.

If all income were consumed, the appropriate index to be used for such correction would be an index of the prices of consumption goods as purchased by the consumers. Since such index is not available we take, instead, as an approximation the index of goods purchased by wage earners and lower salaried workers (*i.e.*, the cost of living index) computed by the United States Bureau of Labor Statistics. However, part of the income which is invested should, therefore, be deflated by a special index of prices of investment goods, or, instead, the total national income might be deflated

by a special price index which is a combination of the cost of living index with an index of investment goods, both weighted in proportion to the apportionment of the national income between consumption and investment.¹

Since, however, figures of the price index of investment goods are not available for the last years, the national income has been deflated only by the index of the cost of living. During the period 1929-1934 the part of the national income which was invested varied within the range of -8.6 per cent and +9.3 per cent.² Thus the error involved in our procedure should

TABLE III

Year	Per capita Income produced in current prices ¹ (dollars)	Per capita Income produced in current prices (index)	Per capita Income produced in 1929 prices ² (index)
	(1)	(2)	(3)
1929	665	100.0	100.0
1930	553	83.2	85.3
1931	431	64.8	72.9
1932	316	47.5	59.2
1933	332	49.9	65.5
1934	313	47.4	60.0
1935	431	64.8	79.9
1936	497	74.7	91.0
1937	533	80.2	94.7

¹ Column (1) in Table I divided by the population of the Continental United States as given in table 12, p. 10 of the *Statistical Abstract of the United States, 1937*.

² Column (2) of this table divided by column (3) of Table I.

not be so large as to invalidate the results. The order of magnitude of the error involved can be judged from Table II which gives the results obtained for the period 1930-1935 by applying Professor Kuznets' combined index of the cost of living and of the prices of investment goods³ and compares with them the results obtained when the cost of living alone is applied to the same figures.⁴

Beginning with 1933, the index of national income deflated by the cost of living index alone shows an over-estimate of 2-3 points, *i.e.*, 3-4 per cent. The national income figures and index given in Table I are not the same

¹ The first procedure was applied by Professor Kuznets in *National Income and Capital Formation, 1919-1935* (National Bureau of Economic Research, 1938). The other was applied by David Weintraub in *Technological Trends and National Policy* (National Resources Committee, 1937), p. 69.

² Cf. Kuznets, *op. cit.*, p. 53.

³ Cf. S. Kuznets, *Income Originating in Nine Basic Industries, 1919-34* (National Bureau of Economic Research, Bull. 59, 1936), table 3, p. 24. The weights given to the cost of living index and to the index of prices of investment goods were 9 and 1, respectively.

⁴ *I.e.*, to figures from the source indicated in footnote to table II.

as those on which Table II is based. They are revised figures published later (the source is indicated in the footnote to Table I). Taking these figures, the index of the real national income obtained through deflation by the cost of living index of the United States Bureau of Labor Statistics, has been calculated and given in column (4) of Table I.

We find that the real national income declined since 1929 till 1932 and started to rise again since 1933 reaching again in 1937 approximately the level of 1929. On the whole, therefore, during the period of 1929-1937 the American economy did not expand, the expansion during 1933-1937 being just sufficient to compensate for the contraction in 1929-1932. It did not contract either. It just managed to maintain its level.

The population of the continental United States increased 7,731,000 from 1929 to 1937.⁵ The United States Department of Commerce estimates of national income apply "largely" to the continental United States.⁶ Since, according to these estimates, the real national income just maintained its level during the period mentioned, the per capita real income has declined. This decline is indicated in column (3) of Table III. The other two columns of this table give the money income per capita measured in current prices, column (1) giving the amount and column (2) an index.

It is found that, although the per capita real income did rise after the sharp drop in the period 1929-1932, it did not recover its 1929 level, being in 1937 5.3 per cent below this level. Since the estimates of national income and, even more, the estimates of real income have only approximate validity, too much significance should not be attached to a variation of this order of magnitude. In so far as these figures indicate a slight reduction in real per capita income, it seems probable that during the period 1929-1937 the American economy was slightly contracting relatively to the population.

The stagnant character of the aggregate real income and the slight contraction in per capita real income during the period 1929-1937 has to be compared with the behavior of national income in the period preceding the depression. For this purpose we have two sources of comparison. The National Bureau of Economic Research has estimated, under the direction of Professor Kuznets, the real national income for the period 1919-1935.⁷ Measured in 1929 prices, the national income rose from \$55.8 billion in 1919 to \$83.4 billion in 1929. Thus over exactly a decade the real national income has increased 49.4 per cent, *i.e.*, at an average annual rate of 4.1 per cent. On the basis of a study of the Brookings Institution Mr. Weintraub has calculated an index of the real national income ("volume of

⁵ Obtained from the figures published in table 12, p. 10 of the *Statistical Abstract of the United States, 1937*.

⁶ Cf. *National Income in the United States, 1929-1935*, p. 8 where the meaning of the term "largely" is also explained.

⁷ S. Kuznets, *op. cit.*, table I, p. 8.

goods and services produced") for the period 1920-1929.⁸ According to this index the real national income rose 46 per cent from 1920 to 1929 (as compared with a rise of 41.9 per cent for the same period, according to Professor Kuznets' estimate).⁹ This is an average annual increase of 4.3 per cent (as compared with 4.0 per cent for the same period, according to the estimates of Professor Kuznets).

TABLE IV

Year	Net capital formation in 1929 prices (millions of dollars) ¹	Net capital formation in 1929 prices, 3-year moving average (millions of dollars) ²	Net capital formation as percentage of national income ³
	(1)	(2)	(3)
1919	7,378		
1920	7,157	5,817	10.3
1921	2,916	5,101	8.8
1922	5,231	5,679	9.3
1923	8,890	6,766	10.2
1924	6,178	8,411	11.9
1925	10,165	8,476	11.6
1926	9,084	9,454	12.5
1927	9,112	8,781	11.3
1928	8,148	9,108	11.4
1929	10,065	7,412	9.3
1930	4,024	4,577	6.2
1931	-358	-736	-1.2
1932	-5,875	-3,513	-6.5
1933	-4,306	-4,571	-8.6
1934	-3,531	-2,765	-4.8
1935	-457		

¹ Source: Kuznets, *National Income and Capital Formation, 1919-1935* (National Bureau of Economic Research, 1937), table 14, p. 48.

² Source: *Ibid.*, table 15, p. 53.

The per capita real income increased, according to the estimates of Professor Kuznets, during the decade 1919-1929 from 533 dollars to 687 dollars (both figures in 1929 prices).¹⁰ This is an increase of 28.9 per cent during the decade, or an average increase of 2.6 per cent each year.

The stagnation of the American economy since 1929 is accompanied by a serious decline in net capital formation. This is shown in Table IV which reproduces Professor Kuznets' estimates of net capital formation.

⁸ *Technological Trends and National Policy*, table 1, p. 69.

⁹ Measured in 1929 prices the national income was \$58.8 billion in 1920.

¹⁰ According to our calculation, based on the estimates of the Department of Commerce, and using the BLS cost of living index for deflation, the per capita income, measured in 1929 prices, was in 1929 \$665 (*vide* table III). The chief reason for the difference is that Professor Kuznets' estimates are more comprehensive than those of the Department of Commerce. Cf. Kuznets, *op. cit.*, p. 76.

As is seen from this table, the net capital formation shows a rising trend during the period 1919-1929, tending to conform to an approximately constant proportion of the national income (10.7 per cent in the average). The value of the capital stock at the beginning of 1919 is estimated by Professor Kuznets at \$165.3 billion (in 1929 prices). The net capital forma-

TABLE V

Year	Unemployed man-years of labor as percentage of supply each year ¹	Employed man-years as percentage of supply each year ²	Productivity index ³
	(1)	(2)	(3)
1920	6	94	100
1921	25	75	111
1922	22	78	126
1923	11	89	120
1924	13	87	123
1925	13	87	127
1926	11	89	124
1927	12	88	123
1928	13	87	129
1929	10	90	126
1930	19	81	118
1931	32	68	120
1932	45	55	120
1933	47	53	134
1934	42	58	134
1935	41	59	139

¹ Source: *Technological Trends and National Policy*, column (8) of table (2) on p. 70.

² Column (1) and column (2) = 100.

³ Source: *Ibid.*, column (4) of table 3 on p. 72. Index of volume of goods and services produced (in column (1) of same table) divided by index of man-years of employment (*ibid.*, column (3) of same table).

tion during the period 1919-1929 was \$84.3 billion (in 1929 prices), i.e., an addition of 51 per cent to the capital stock from the beginning of 1919.¹¹ This gives an average annual rate of accumulation of 3.8 per cent for the 11 years preceding the depression. During the depression the net capital formation drops heavily, becoming negative in the years 1931-1935. On balance there was during the years 1930-1935 a diminution of the capital stock by \$10.5 billion (in 1929 prices), which is about 4 per cent.

Some further light on the rate of economic progress is shed by a study of the organizational efficiency of the American economy. A convenient starting point for such a study is found in Table V which is based on Mr. Weintraub's investigations for the National Resources Committee. Columns

¹¹ Kuznets, *op. cit.*, pp. 50-51.

(1) and (2) indicate that up to 1930 unemployment fluctuated around a constant level. During the period 1923-1929 this level was 12 per cent¹² of the supply of labor (in man-years) available for hire. During the depression unemployment increased very strongly, reaching 47 per cent in 1933.

Mr. Weintraub's data go only as far as 1935. We can supplement them for 1937 with the data furnished for 1937 by the Census of Unemployment.¹³ According to the census in November, 1937, 16.4 per cent of the population available for employment were totally unemployed and 3.8 per cent were employed in emergency works. This makes the percentage of those for whom the economic system was not able to find employment

TABLE VI

Period	Unemployment as percentage of labor supply	Percentage in- crease in em- ployment neces- sary for full employment	Percentage in- crease in real national income corresponding to full employment ¹	Short-period organizational efficiency ²
	(1)	(2)	(3)	(4)
1923-1929 ³	12	14	10	0.91
1929	10	11	8	0.93
1937 ⁴ (a)	20	25	19	0.84
1937 ⁴ (b)	25	33	24	0.81

¹ Obtained from the production function $P = 1.01 L^{1/4} O^{3/4}$ where C is kept constant.

² 100 divided by column (3) increased by 100.

³ Average from column (1) of table V.

⁴ From *Census of Unemployment in 1937*, (a) is a conservative estimate, partial unemployment not being taken into account; (b) is the estimate under the assumption that the partly unemployed worked half-time.

20.2. In addition there were 10.2 per cent partly unemployed. The hours worked by them are not known. Assuming that they worked half time this would give 5.1 per cent. Taking the partly unemployed into account it is a safe guess to assume unemployment to have been between 20.2 and 25.3 per cent of the available labor supply, and rather nearer to the upper figure. These figures, of course, are not directly comparable with those in Table VI. They do, however, indicate that in 1937 unemployment had not dropped to the pre-depression level. It is interesting to notice that the percentage of unemployed in the pre-depression period (1923-1929) was approximately the same as in pre-war times. According to Professor Douglas' investigation, the percentage of unemployed in manufacturing, transportation, the building trades and mining in the period of 1897-1926 was 10.2 per cent.¹⁴

¹² During the whole period 1920-1929 it was 14 per cent.

¹³ *Final Report on Total and Partial Unemployment*, vol. iv, by C. L. Dedrick and M. H. Hansen, 1938, table 6, p. 20.

¹⁴ Paul H. Douglas, *Real Wages in the United States, 1890-1926*, 1930, p. 459.

¹⁵ Cf.

An independent investigation by Mr. Hornell Hart gives the percentage of unemployment of non-agricultural labor in the period 1902-1917 as 9.9 per cent. Since these figures do not include agricultural unemployment or part-time unemployment and Mr. Weintraub's figures do, the percentage of unemployment seems to be comparable.

The organizational efficiency of the economy has been defined as the ratio of the national income actually produced to the national income that could be produced with the existing productive resources. In order to know what national income might be produced under conditions of full employment, we have to know the increment of output resulting from an increase of employment. The additional labor being applied to existing capital equipment and natural resources, the increment of output is subject to diminishing returns. A *tentative* estimate of the effect of an increase of employment on output may be obtained by use of Professor Douglas' production function. For the period 1899-1922 this function is

$$P = 1.01 L^{.75} C^{.25},$$

where P denotes the output and L and C denote the quantity of labor and capital, respectively.¹⁵ Recent, and as yet unpublished investigations of Professor Douglas indicate that approximately the same values of the exponents hold also for a more recent time. Holding C constant, an increase of employment K times increases output $K^{.75}$ times. Hence we obtain the figures in column (3) of Table VI.

The figures in column (3) of Table VI indicate the percentage increase of the real national income which could be obtained by applying all the available supply of labor to the existing capital equipment (and natural resources). Adding to it 100, we obtain the ratio of the national income which could be produced to the national income actually produced. The organizational efficiency of the economy is the reciprocal ratio. This is given in column (4) of Table VI.

It is interesting to notice that, according to Professor Douglas' production function, the increase of national income resulting from the attainment of full employment would have been in 1929 only 8 per cent, as compared with 19 per cent estimated by the Brookings Institution and a much larger percentage estimated by Mr. Harold Loeb. It seems that the last two estimates, done by different methods, are highly excessive. But even the estimate from Professor Douglas' production function seems excessive, too. For Professor Douglas' function yields a marginal productivity curve of labor which is convex to the axis representing the amount of labor. This seems rather unrealistic for high degrees of employment. If employment is very high, it seems more appropriate to assume that the efficiency of those who remain unemployed under such favorable conditions is so low that a further increase

¹⁵ Cf. Paul H. Douglas, *The Theory of Wages*, 1934, p. 133.

of employment would lead to diminishing returns along a marginal productivity curve which is concave to the axis representing labor. It seems, therefore, that in 1929 national income could have been increased only by much less than 8 per cent and that the national income in 1929 was as near to the income corresponding to full employment as can be expected.

Compared with the period 1923-1929, the organizational efficiency of the American economy has declined very heavily, as illustrated by Mr. Weintraub's index of the average productivity of labor which is reproduced in column (3) of Table V. This index is obtained by dividing the index of goods and services produced (real national income) by the index of employment. It seems reasonable to suppose that the steady increase of the average productivity of labor which is shown by this index continued in 1936 and 1937. But even disregarding the increase in these two years, the average productivity of labor has risen since 1929 from 126 to 139, *i.e.*, 10 per cent. The real national income, however, has only recovered (in 1937) its 1929 level. Thus the increase in productivity has been wholly wasted by unemployment. According to Table VI under full employment the national income would have been greater by 19-24 per cent. This would have made possible in 1937 the production, with the existing capital equipment, of a per capita income of \$624-661 (in 1937 prices) as compared with \$533 per capita actually produced.

The deterioration of the organizational efficiency of the economy is a phenomenon common to all countries with an advanced industrial capitalist economy. For Great Britain, Mr. Colin Clark has established the significant fact that, while real income per person in work has been increasing rapidly since 1924, real income per occupied person, including the unemployed, increased much less. The increase of real income per person at work has been largely wasted by unemployment. As in the United States, this is in sharp contrast to the pre-war period when unemployment fluctuated around a constant percentage and real income per person in work and per occupied person, including the unemployed, moved nearly parallel.¹⁶

The waste of productive resources due to unemployment is, however, much greater than appears from our coefficients of the organizational efficiency of the economy. For the increase of income obtained by employing fully the existing resources would lead to an increase of the rate of net capital formation which, in turn, would increase the national income obtained from the existing supply of labor and natural resources. This would increase further the rate of net capital formation, again increase the national income, etc., etc. The result would be an increased rate of economic expansion. Had not the depression stopped the net capital formation in the United States for several years, the capital equipment in 1937 would have been much greater. Thus the national income in 1937 suffered not only from the absence of

¹⁶ Cf. Colin Clark, *National Income and Outlay*, London, 1938, table 103, p. 232, and diagram II, p. 233.

full employment in 1937 but also from the absence of full employment during the period 1930-1936.

The conclusions reached in this paper are as follows:

(1) During the period 1929-1937 the American economy was stagnant and probably slightly contracting relatively to the population. This should be compared with a rate of increase of the real national income of approximately 4 per cent a year and a rate of increase of per capita real income of 2.6 per cent a year during the period 1919-1929. The trend is largely due to the severity of the depression. Since 1933 both total real national income and per capita real income are increasing rapidly, and it is likely that this increase will continue for the next years.

(2) Compared with pre-war times and with the period preceding the depression, the organizational efficiency of the American economy has declined heavily, the increase of productivity of labor being largely wasted by an increased percentage of unemployment. Even in the period 1923-1929 the national income could have been 10 per cent and in 1937 it could have been 19-24 per cent higher than it was, had it not been for the wastage through unemployment. The latter figure does not take into account the effects of the stoppage of net capital formation which resulted from the depression. The rate of economic expansion proves to have been insufficient to take care of the increased average productivity of labor.

(3) Any prediction as to the future of economic expansion in the United States can be made only on the basis of a knowledge of the causes which stopped economic expansion since 1929 and of the expectation as to whether, and in what degree, these causes are likely to persist in the future. The events since 1929 in the United States and in other countries with an advanced industrial capitalism show that private capitalism suffers from a lack of sufficient inducements to invest which prevent it from securing full employment of the existing productive resources. The argument is frequently raised that this is due to political interference which discourages private investment. In answer to this it has to be pointed out that the depression came at a time when (particularly in the United States) no appreciable amount of such interference was exercised and that at present the level of economic activity is maintained in most countries by public investment. To blame political interference and public investment for the failure of private capitalists to invest is to mistake the effect for the cause.

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A NEGLECTED COMPONENT OF THE MONEY SUPPLY

Failure to appreciate the scope of the bank clearing mechanism has led monetary writers to base their analyses on a definition of the money supply which includes only currency and deposit balances. This procedure neglects the fact that checks may serve to a large extent as an independent form of money. When a bank simultaneously debits and credits checks to a bank account at the time of posting, it is performing a true clearing process which renders part of the volume of checks independent of any deposit balance that may exist within the bank account. In so far as checks can be cleared within particular bank accounts at the times of bank postings, their volume may increase without relation to the amount of deposit balances. Only to the extent that intra-account clearing is imperfect do deposit balances function as a means of payment. To regard these balances as the main part of our money supply obscures the fundamental rôle of clearing in our economic system and fosters ineffectual policies of quantitative monetary control.

Much current monetary theory rests on an assumption concerning the supply of money that is highly unrealistic in view of the operation of our banking mechanism. The money supply is generally considered to be identical with the stock of cash balances (currency plus deposit balances) held by the community at any moment of time.¹ A corollary of this assumption is that the stock of balances in existence over a period of time serves as the source of *all* money payments made during that period.² The fact, however, that a substantial portion of the money supply never takes the form of cash balances serves to limit the validity of *any* type of monetary theory based on the above assumption.

The process of simultaneously offsetting debit and credit entries within a bank account at the time of bank posting releases a certain portion of the checks outstanding at any given moment from any dependence on deposit balances, and therefore makes such checks a distinct component of the money supply. This process may properly be called intra-account clearing;³ and, as indicated by the following data compiled from the bank account of a business firm, such clearing may occur on a significant scale.

The debits column shows the daily posting of checks previously drawn against this account and presented against it since the preceding posting. The credits column shows the daily posting of checks presented for deposit to this account since the preceding posting. The offset column indicates the daily volume of intra-account clearing,—*i.e.*, the amount of checks which when debited to the account were offset by checks simultaneously

¹ L. Currie, *The Supply and Control of Money in the United States*, Cambridge, 1935, pp. 12-13; J. W. Angell, *The Behavior of Money*, New York, 1936, pp. 7-11; H. S. Ellis, *German Monetary Theory, 1905-1933*, Cambridge, 1934, pp. 190-193; J. R. Hicks, "A Suggestion for Simplifying the Theory of Money," *Economica*, 1935, vol. 2, p. 4; J. M. Keynes, *The General Theory of Employment, Interest and Money*, New York, 1936, p. 167 ff. Cash balances will be considered synonymous with deposit balances in this analysis.

² A. W. Marget, *The Theory of Prices*, New York, 1938, vol. 1, pp. 351-352, 461-462.

³ W. C. Dunkman, *Qualitative Credit Control*, New York, 1933, p. 112.

INTRA-ACCOUNT CLEARING IN A BUSINESS FIRM'S BANK ACCOUNT, FEBRUARY, 1938

Date	Debits	Credits	Offset ^a	Non-offset	Initial ^b balance	Non-offset ÷ initial balance (per cent)
February 1	\$ 437.50	—	—	\$ 437.50	\$ 591.37	73.98
2	—	—	—	—	153.87	—
3	19.21	—	—	19.21	153.87	12.48
4	6.14	—	—	6.14	134.66	4.56
5	197.55	\$1,000.00	\$ 197.55	—	128.52	—
6 ^c	—	—	—	—	—	—
7	2,802.42	4,000.00	2,802.42	—	930.97	—
8	4,931.79	3,500.00	3,500.00	1,431.79	2,128.55	67.27
9	92.81	—	—	92.81	696.76	13.32
10	30.48	205.76	30.48	—	603.95	—
11	284.60	—	—	284.60	779.23	36.52
12 ^c	—	—	—	—	—	—
13 ^c	—	—	—	—	—	—
14	197.90	513.52	197.90	—	494.63	—
15	—	—	—	—	810.25	—
16	465.22	—	—	465.22	810.25	57.42
17	17.82	—	—	17.82	345.03	5.16
18	29.70	—	—	29.70	327.21	9.08
19	21.78	—	—	21.78	297.51	7.32
20 ^c	—	—	—	—	—	—
21	465.66	3,000.00	465.66	—	275.73	—
22 ^c	—	—	—	—	—	—
23	4,288.03	5,000.00	4,288.03	—	2,810.07	—
24	2,184.02	500.00	500.00	1,684.02	3,522.04	47.81
25	636.57	—	—	636.57	1,838.02	34.63
26	432.97	750.99	432.97	—	1,201.45	—
27 ^c	—	—	—	—	—	—
28	904.70	—	—	904.70	1,519.47	59.54
Total	18,446.87	18,470.27	12,415.01	6,031.86	—	—

^a The offset data are inexact in so far as the computations are based on the assumption of only one posting at the end of each day, whereas this bank also conducts a morning posting of debits. Since there is no method of allocating check deposits between the morning and afternoon postings, the exact amount of offsetting cannot be determined. This defect in the data, however, is compensated to the extent that check deposits are distributed throughout the day in about the same proportions as checks received against the account.

^b Whereas bank records show the deposit balance as of the end of each day, the table has been arranged to show the balance as of the beginning of each working day. This procedure facilitates the computation of the percentage of the deposit balance utilized each day.

^c Legal holiday.

Note: A dash indicates a zero amount in the column for the day concerned.

Source: Bank ledger.

credited to the account.⁴ The deposit balance existing within the account was used as a means of payment only on those days when current debit entries exceeded current credit entries at the time of posting, as indicated

⁴ Note that intra-account clearing does not involve the unrealistic assumption of perfect coincidence of a firm's payments and receipts. Checks posted as credit entries may have

by the non-offset column. The last column shows the percentage of the existing deposit balance that was utilized from day to day.

Two facts are immediately obvious: not all check receipts become a part of the firm's deposit balance; nor are all check payments made out of the firm's deposit balance. A large part of the receipts and payments made through the account have no effect on or relation to the size of the balance existing within the account. Over two-thirds of the volume of checks drawn on and presented against the account during the month were offset at the time of posting by checks simultaneously credited to the account. On seven days out of the twenty days on which checks were debited to the account, the deposit balance existing within the account was not utilized at all as a means of payment. The conclusion would seem to be that the checks which serve as our main means of payment in this country are not necessarily based on deposit balances.

The argument may arise, however, that intra-account clearing merely represents a certain degree of rapidity of transfer of deposit balances.⁵ It may be argued, for example, that even though debit and credit entries are posted simultaneously, the checks which are credited to the account represent a momentary deposit balance which is instantaneously transferred. The weight of this argument must be judged in light of the following considerations.

The argument neglects the distinction between a deposit and a deposit balance—a distinction obvious enough with reference to the computation of legal reserves, overdraft balances, etc. A deposit refers to money items presented for credit to a bank account, while a deposit balance refers to the excess of credit over debit entries existing within a bank account. On the basis of this distinction, there is no *a priori* reason for believing that every deposit to a bank account must become a deposit balance, even if only for a moment. As far as the bank posting process is concerned, it is immaterial whether debits or credits are first posted to a customer's account. The important feature from the point of view of the money supply is the fact that one type of entry is offset by the other type during the posting process.

Intra-account clearing differs in no important respect from inter-bank clearing; yet one would hesitate to describe the latter process as an instantaneous transfer of balances. In inter-bank clearing, to be sure, the exchange of checks among banks accompanies the offsetting by each bank of checks received through the clearing house against checks presented to the clearing house. In intra-account clearing, on the other hand, the exchange of checks among the holders of bank accounts precedes the offsetting in each account of checks drawn on that account against checks deposited to that

been received by the holder of the account at a date different from that on which the checks posted as debit entries were drawn.

⁵ Cf. J. W. Angell, "The Components of the Circular Velocity of Money," *Quart. Jour. of Econ.*, vol. LI (February, 1937) p. 232 ff.

account. Note, however, that in *neither* process is the exchange of checks necessarily mutual. Any bank which presents checks on other banks and receives checks on itself takes part in the inter-bank clearing process even if the checks which it presents are against one bank (or banks) and the checks which it receives are from an entirely different bank (or banks). It is the offsetting of debits and credits within a particular account that constitutes the essence both of inter-bank and intra-account clearing.⁶ If inter-bank clearing can be considered a distinctive method of settling debts, intra-account clearing has every right to be considered in the same light.

Granted the distinctive nature of the intra-account clearing of checks as a means of settling debts, the rôle of deposit balances as a means of payment must be viewed in a new light. Deposit balances are generally regarded by monetary theorists as the source of all check payments.⁷ Actually these balances are used to settle *excesses* of debit over credit entries which occur within bank accounts at the times of posting. From this point of view deposit balances as a means of payment merely supplement the clearing of checks. The more completely checks offset each other within bank accounts at the time of posting, the less need there is for deposit balances as a means of payment.

A consideration of the process of inter-bank clearing indicates that banks are concerned only with clearing differences. Checks which a bank presents through the clearing house are considered legal claims against the funds of the banks on which those checks are drawn. If checks were merely claims against balances, one might expect that all checks presented through the clearing house would be debited at the federal reserve bank to the reserve accounts of the appropriate member banks. Actually, the reserve bank debits and credits the reserve accounts of its members only in accordance with the differences remaining after the inter-bank clearing process has been completed at the local clearing house. In the case of intra-account clearing, a bank does enter each debit and credit to a particular account, but only as a means of determining the new deposit balance. As far as the bank's credit position is concerned, a daily statement from each customer of the net credit or debit balance resulting from his daily transactions would suffice. The volume of bank credit in the form of deposit balances thus appears as a function of the clearing of checks which, particularly in the accounts of business firms, largely offset from day to day.

The volume of checks outstanding in a community at any point of time

⁶ Failure to appreciate this point has probably led monetary writers to overlook the immense scope of the bank clearing process.

⁷ "We may think of the deposit as a kind of generating station or mother-ship for checks: and though it is a bad and foolish practice as a rule to create new names for common things, it may help us to bear this relation in mind and also to avoid some cumbrousness of phrasing, if we call a person's deposit his *checkery*, because it is both a breeding-ground and a homing-place for checks, as a rookery is for rooks." D. H. Robertson, *Money*, New York, 1929, p. 54.

might well exceed the total volume of existing deposit balances.⁸ Such a situation would simply imply that a sufficiently large percentage of the volume of outstanding checks would offset within bank accounts at the next bank posting. The table shows that on February 5, 7, 8, 21 and 23, checks to be debited to the business firm's account exceeded the deposit balance existing within the account. The same situation might exist at the same time in the bank accounts of a large number of firms, the bulk of the debit entries being offset at the time of posting by simultaneous credit entries. Once the fact is fully appreciated that the size of deposit balance required by a firm as a means of payment on a given day is determined by the *excess* of debits over credits to its account at the time of posting, the possibility that outstanding checks may exceed existing deposit balances at any point of time is apparent.

Furthermore, if all debit entries to a firm's bank account over a period of time were offset at the times of posting by credit entries, the firm could increase its payments without the need of a deposit balance.⁹ Differences in customary payment periods, of course, make such a situation very unlikely. Nevertheless, a substantial part of the increase in a firm's expenditures over a period of time may be offset when charged to the firm's account by simultaneous credit entries. The actual amount of offsetting will depend on such factors as the frequency of bank postings,¹⁰ the rate at which other firms and individuals are increasing their expenditures, the nature of the firm's business (whether the technological conditions of production impose a long or short interval between an increase in expenditures and an increase in receipts), and the amount of commercial book credit available to the firm. The question then arises, "To what extent can the deposit balance that a firm requires as a means of payment, when debits to its account at the time of posting are not completely offset by simultaneous credits, be considered a limiting factor on a proposed increase in the firm's expenditures?" The answer to this question is of the greatest importance for any policy of monetary control based on regulation of the volume of deposit balances.

Business-men through familiarity with the nature of their markets are able to judge fairly accurately for short periods in the future the volume and distribution of their receipts; and, thus, are able to base current expenditures to a considerable extent on anticipated receipts which will be offset

⁸ Outstanding checks refer to those checks which have been drawn in *bona fide* payment of debts, but have not yet been credited to the accounts of those receiving the checks.

⁹ The increase in credits to one firm's account would not imply a corresponding reduction of deposit balances in the accounts of other firms or individuals, since their receipts might also be increasing.

¹⁰ Since posting actually occurs at least once a day in all banks in this country, those accounts through which check payments and receipts are occurring daily will show a larger ratio of checks cleared to checks drawn than less active accounts.

within their accounts at the times of posting by checks chargeable to their accounts. Only in so far as estimated future receipts will not be sufficient to offset estimated expenditures will existing deposit balances and prospective borrowing facilities at the banks limit a proposed increase in expenditures by a business firm.¹¹

The monetary authorities, however, have no means of determining in advance the extent to which deposit balances will be required by business firms to supplement the clearing of checks as a means of settling debts. During the boom period of the business cycle when control is most likely to be invoked, simultaneous increases in expenditures on the part of many firms may proceed with a relatively insignificant use of deposit balances as a means of payment. The very growth in the volume of check transactions increases the probability that checks will offset within bank accounts at the times of posting.¹² Greater continuity of a firm's purchases and sales as a boom period develops will also increase the proportion of offsetting that occurs within its bank account. As a result, many firms will rely to an increasing extent on the clearing of checks within their bank accounts as a means of settling their debts. Thus a drastic monetary policy with respect to bank expansion of credit will most likely be required to insure a significant check on business activity during a boom period.

Intra-account clearing raises certain problems of definition and methodology for monetary theory. In view of this process the money supply can scarcely be identified with the stock of cash balances existing at a point of time. Cash-balance theorists would object to the inclusion of outstanding checks within the money supply on the grounds that checks merely represent deposit balances in transit; and that, therefore, their inclusion in the supply of money would involve duplication. If checks were merely instruments for the transfer of deposit balances, their inclusion in the money supply would indeed involve duplication; but in so far as intra-account clearing occurs, checks become a distinct form of money, independent of deposit balances. Thus that portion of the volume of outstanding checks which will clear at future bank postings must be included along with the stock of cash balances in any realistic definition of the supply of money. Since that portion is not known until future bank postings, however, the magnitude of the total money supply at any point of time cannot be known.¹³

Furthermore, once checks are cleared within bank accounts they no longer can serve as a means of payment among individuals and business

¹¹ Cash-balance theorists would include borrowing facilities at the banks among the factors affecting the rate of expenditure of cash balances. What these facilities really affect is the rate of check expenditures per period of time—expenditures to a large extent made independently of existing deposit balances. Cf. A. W. Marget, *op. cit.*, p. 472 ff.

¹² H. P. Willis, *The Theory and Practice of Central Banking*, New York, 1936, p. 345.

¹³ See J. W. Angell, *op. cit.*, pp. 5-11.

firms. Thus, there is no precise distinction between the supply of money and the volume of money payments over a period of time. Part of the volume of money payments consists of checks which due to the intra-account clearing process represent a distinct component of the money supply, but which end their existence as a means of payment once they have served in the particular transactions for which they were drawn. Any analysis, then, which treats the supply of money and the volume of money payments as determined to a large extent by different sets of forces is unsatisfactory.¹⁴ Increases in the volume of money expenditures will occur partly in the form of checks which will clear within bank accounts, and partly in the form of checks drawn in increased amounts against existing or newly created deposit balances. The forces which determine increases in the volume of money expenditures automatically determine increases in the supply of money in the form of cleared checks.

Obviously, the money supply cannot be safely treated as an independent variable, the magnitude of which is determined by the monetary authorities (including the banking system).¹⁵ Business-men, and not the banks, create that part of our means of payment consisting of checks which clear within bank accounts. On highly organized markets like the stock exchange, traders can largely dispense with any form of money as a means of payment since debts are settled through a direct clearing of debits and credits within brokerage accounts. On less highly organized markets checks are the money medium through which debits are offset against credits within individual bank accounts. Only in so far as checks cannot be cleared are deposit balances utilized as a means of payment. Any type of monetary theory which deals exclusively with the disposition of cash balances must, therefore, be considered highly unrealistic.

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¹⁴ Such a treatment is implicit in any analysis which accepts the "quantity equations" as a methodological starting point.

¹⁵ J. M. Keynes, *op. cit.*, pp. 246-247.

THE RELATIONSHIP BETWEEN INCOME AND SAVINGS OF AMERICAN METROPOLITAN FAMILIES¹

The study of consumer purchases, undertaken by several agencies of the federal government in 1935-36, makes it possible to establish the relationship between yearly income and savings—or deficits—of native, white, non-relief families. In this analysis, use was made of the data for 8 cities with population over 100,000 in different regions of the United States. A skew hyperbola of the form

$$y = a + bX + c/X,$$

where X represents family income in thousands of dollars and y the amount of net change in assets and liabilities (Y) in per cent of family income, was found to be a very satisfactory simple mathematical expression for the sequences of scatter points between \$500 and \$20,000 of income. For higher income strata the curve type has to be modified. Table I contains some characteristics of several of the relationships obtained. The income elasticity of savings ($\eta = \partial Y/\partial X \cdot X/Y$) is larger than 1 everywhere, but decreases if we move from the break-even point to an income of \$10,000. Families with very low incomes do not manifest a fixed-minimum-of-existence policy. There is an astonishingly high degree of similarity between the average relationship found for metropolises and large cities in 1935-36 and that obtained from the Brookings data in *America's Capacity to Consume*. The percentage of aggregate family income saved was computed for different cities and its determinants analyzed.

I

The relationship between family income and savings represents an important detail of the economic system. If we know this relationship, we are able to give more precise answers to questions arising in business-cycle analysis, analysis of consumers' behavior and other branches of economic research. Until now, knowledge of this relationship has been rather unsatisfactory, because data were scarce, limited in scope and unrepresentative. The study of consumer purchases, undertaken by several agencies of the federal government, has filled this gap, at least for the year 1935-36. In the following, we shall use the data obtained in this study to investigate the relationship between yearly income and savings—or deficits—of native, white, non-relief, "normal" families living in large cities and metropolises.²

¹ A preliminary draft of this paper was read before the annual meeting of the Econometric Society in Detroit, December, 1938. Table I corresponds to a mimeographed table distributed at this occasion. It has been found, however, that the figures on income elasticities of savings and deficits appearing in the former presentation were not exact enough, and that there were errors in the regression parameters computed for Chicago, Denver and the average of all metropolises and large cities. Table I gives the corrected figures.

I am very much indebted to Dr. Faith M. Williams of the Bureau of Labor Statistics, Dr. Hildegard Kneeland of the National Resources Committee, Washington, D.C., and to Professor A. D. H. Kaplan of the University of Denver for making unpublished material of the consumer purchases study available to me. They as well as several staff members of this investigation, in particular Miss M. Hartsough and Mr. G. Dantzig, gave me valuable advice in analyzing the material. Robert Moyer, student of Colorado College, gave technical assistance in the analysis of the data.

² "Large cities" have a population of 100,000 to 1,500,000, "metropolises" of more than 1,500,000 inhabitants, according to the Census of 1930. The term "metropolitan families" is used here to designate families living in cities of more than 100,000 inhabitants. "Normal" families include husband and wife with or without children.

II

A series of charts shows how net savings—or net deficits—expressed as a percentage of total family income, vary with annual incomes ranging

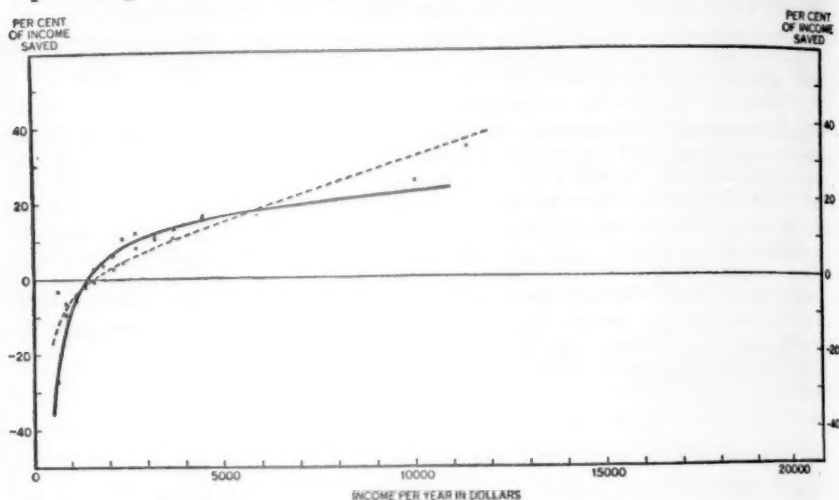


CHART 1: Income-savings relationships for Atlanta (---) and Omaha (—). Scatter points pertaining to Atlanta (•) and Omaha (×). In this and the following charts each curve is drawn over the range of observations on which it is based.

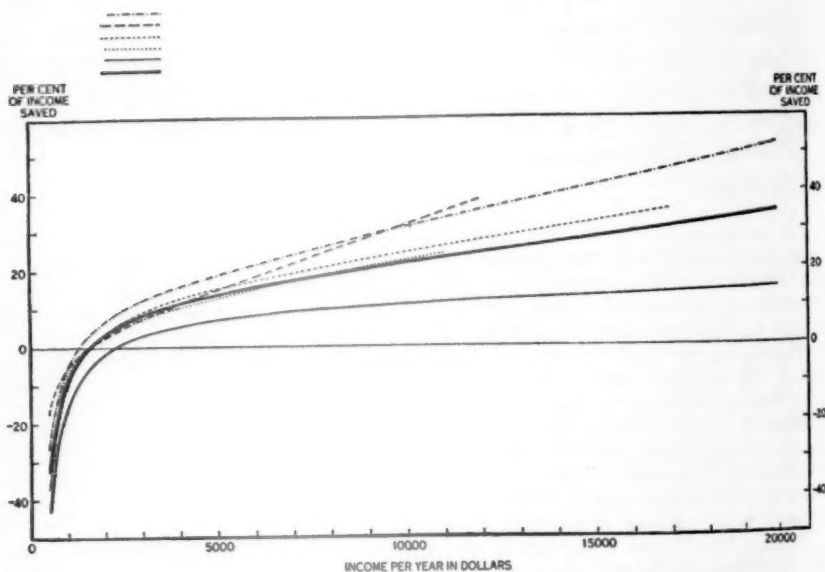


CHART 2: Income-savings relationships for New York (—), Chicago (---), Providence (...), Columbus (-.-), Atlanta (---) and for metropolises and large cities together (—).

from \$500 to \$10,000 and more. In Chart 1, observed values and curves fitted to them are shown for the cities of Atlanta, Georgia, and Omaha, Nebraska.³ Since the goodness of fit obtained for the different cities does not vary much (see below Table III), it was decided not to give the scatter points for other cities. Chart 2 represents the relationships obtained for the metropolises of New York and Chicago and four large cities: it also contains a curve showing the average income-savings relationships for

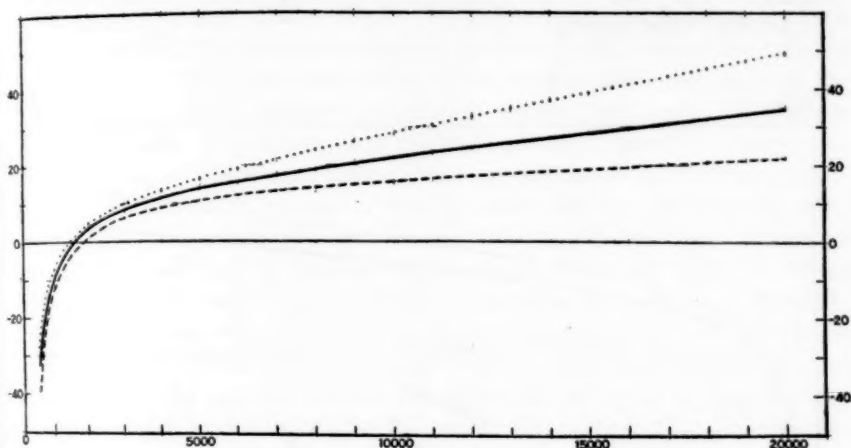


CHART 3: Income-savings relationships for large cities (...), metropolises (---), metropolises and large cities together (—).

metropolises and large cities together. The latter curve is based on the weighted averages of the product moments computed for individual cities. Footnotes h-j of Table I indicate the weighting procedure. Chart 3 shows the average curves for large cities and metropolises separately and combined.

For comparison the figures for non-farm families—in small as well as large cities—established by the Brookings Institution in *America's Capacity to Consume* have been treated the same way. The Brookings curve has been fitted to data for the income range from \$0-\$20,000 only, since the estimates of savings for higher incomes are very problematic.

Before talking about the characteristics of the particular curves, I want to comment briefly on their general nature. After experimenting with different types of curves (parabolas, exponential functions and hyperbolas) I found that a skew hyperbola of the formula:

$$(1) y = a + bX + c \frac{1}{X}$$

³ When reference is made to Omaha, we are talking of the twin cities of Omaha, Nebraska, and Council Bluffs, Iowa.

constituted the most satisfactory simple mathematical expression for the various sequences of scatter points. (The symbols are explained in footnote (a) of Table I.) Such curves generally gave a good fit to the data,⁴ and they have some other points in their favor: (1) at 0-income they show plus infinity for deficits as a per cent of income; (2) the income elasticity of savings is not necessarily constant, but can be so⁵; (3) the curves can be fitted by least squares. On the other hand, the fact that the curves may show higher savings than income ($y > 100$) at some finite amount of income constitutes a shortcoming.

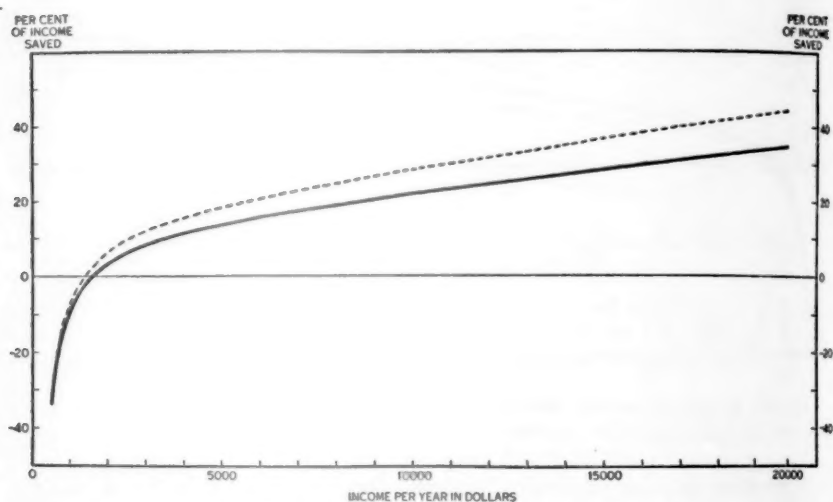


CHART 4: Income-savings relationships for non-farm families 1918-1930. Brookings data (---) and metropolitan families (large cities and metropolises) 1935-1936 (—).

Absolute amounts of savings—and deficits—instead of percentages can easily be computed with the help of the formula:

$$(2) Y = (aX + bX^2 + c) / 100,$$

where a , b and c are taken over from formula (1).⁶ I preferred to fit the curves to the percentages of savings—and deficits—in order to give equal

⁴ It is only for New York that a slight systematic divergence between scatter points and curve appears. For this city the rate at which the tangent to the curve turns between \$2,000 and \$3,000 of income is not high enough to make the curve follow the scatter perfectly.

⁵ It must however be noted that the income elasticity of savings can only be constant over the whole income range at certain values: at 0, if a and b turn out zero; at 1, if b and c turn out zero; at 2, if a and c are zero.

⁶ Since income (X) was taken in thousands of dollars, Y represents the amount of savings or deficits in thousands of dollars. It is obvious from formula (2) that $\frac{c}{100}$ represents the theoretical amount of deficits in (\$1,000) at an income of 0.

weights to equal proportions of income and not to equal dollar amounts saved. It is an empirical fact that the absolute variability of expenditures increases with income. I assumed the variability of the amount of savings to be proportional to the square of income. The scatter points have been weighted by the number of expenditure schedules completed in the respective income class. The Brookings data have not been weighted.

The general picture which the curves show can be summarized as follows: The low income classes show net deficits in all cities. But with increasing income the relative deficits diminish rapidly. At incomes between \$1,500 and \$2,750, the various curves reach the point where the families "break even." If income rises further, the families show net savings; the percentage of income saved increases with income, but the rate of increase becomes smaller and smaller, first rapidly, then more slowly. Since savings as a per cent of income are increasing over the whole income range considered, the absolute amount of savings must rise too, first slowly, then more rapidly. It must, however, be borne in mind that these statements are reliable only for the income range between \$500 and \$10,000. There is for each city only one observation between \$10,000 and \$20,000. Though the various curves fit these highest income points well, their extension beyond \$10,000 must be considered as much less reliable than the values they yield for incomes between \$500 and \$10,000. A simple extrapolation of the curves beyond an income of \$20,000 must be considered as extremely venturesome. It can be shown that even before an income of \$100,000 is attained, some of the curves show saving in excess of total income. This fact gives a sufficient warning to over-bold extrapolators; on the other hand, it should not deter us from using these curves for the income range where they appear wholly adequate. If we knew more about the savings from higher incomes than \$20,000, we could allow for them in choosing the curve type. Since we do not know how rapidly the percentage of income saved tends to become constant in the high income strata and where it starts falling again, there is not much use in looking for a curve sensible to changes in those unknown territories. For the very high incomes, a series of factors like taxes, donations, type and organization of business are likely to play an important rôle in determining what the family budget shows as savings and as income.

III

Table I shows some characteristics of the 10 curves, *viz.*, their parameters, the income at the "break-even" point and at the point where savings represent 2 per cent of income; the income elasticities of deficits and savings for various incomes and finally a measure of the degree to which families running deficits seem to adopt and to maintain a fixed minimum-plane-of-living policy.

Let us first compare the curves for the 8 cities among themselves. While the New York families appear throughout to be the least thrifty, the rank of the most thrifty large city is not held by one city over the whole income range: it belongs to Atlanta between \$500 and \$1,000—where deficits are smallest in Atlanta—to Columbus between \$1,000 and \$9,500. Then the first rank in thriftiness returns to Atlanta. The income at the "break-even" point gives a further illustration of the ranking of the cities according to their thriftiness. Columbus families succeed earliest in breaking even; Omaha, Portland, Denver, Atlanta, Providence and Chicago follow at only slightly higher incomes, while families in New York need nearly \$1,000 more than in Columbus to balance incomes and expenditures. The ranking of the 8 cities at the "2 per cent savings" point is approximately the same—Atlanta and Chicago have exchanged their rank—but the range of incomes is somewhat larger.

At this stage of the analysis, we are not in a position to say much about the influences accounting for the intercity differences in thriftiness. First of all, several of these differences may not be statistically significant. In particular, the ranking of the cities except New York according to the incomes at the "break-even" and "2 per cent" points is possibly insignificant.

TABLE I—CHARACTERISTICS OF INCOME-SAVING RELATIONSHIPS

$$y = a + bX + c \frac{1}{X}$$

Data	PARAMETERS			INCOME AT	
	<i>a</i>	<i>b</i>	<i>c</i>	"Break-even" point in \$1,000 ^b	"2% point" in \$1,000 ^c
(1)	(2)	(3)	(4)	(5)	(6)
New York	11.27	.252	-27.15	2.29	2.75
Chicago	13.48	1.378	-25.49	1.62	1.84
Providence, R.I.	8.37	1.609	-17.26	1.58	1.85
Columbus, Ohio	12.79	2.036	-20.26	1.31	1.50
Omaha, Neb. and Council Bluffs, Iowa	18.33	.719	-27.07	1.40	1.60
Portland, Ore.	10.00	2.233	-18.96	1.44	1.65
Denver, Colo.	9.69	1.988	-20.00	1.56	1.78
Atlanta, Ga.	1.36	3.133	-9.98	1.58	1.90
2 metropolises ^b	13.59	.493	-26.59	1.83	2.10
6 large cities ^d	9.51	2.178	-17.96	1.42	1.63
Metropolises and large cities ^d	11.60	1.415	-21.17	1.54	1.75
Brookings ^k	15.76	1.498	-25.03	1.40	1.55

Data	INCOME ELASTICITY ^f					Degree of adoption of a fixed-minimum-plane-of-living-policy at an income of ^g	
	of deficits at an income of		of savings at an income of				
	\$650	\$1,300	at the "2% point" ^d	\$2,376 ^e	\$10,000	\$650	\$1,300
(1)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
New York	-.38	- 1.28	6.33	28.34	1.47	.12	.12
Chicago	-.62	- 3.94	9.28	3.33	1.66	.15	.17
Providence, R.I.	-.61	- 4.49	7.16	3.26	1.78	.10	.13
Columbus, Ohio	-.80	- 1.29	9.45	2.47	1.72	.15	.18
Omaha, Neb. and Council Bluffs, Iowa	-.84	-13.03	10.31	2.52	1.43	.19	.20
Portland, Ore.	-.73	- 9.41	8.68	2.82	1.80	.13	.16
Denver, Colo.	-.62	- 4.79	8.34	3.19	1.79	.12	.15
Atlanta, Ga.	-.46	- 4.25	6.64	3.53	2.02	.05	.10
2 metropolises ^h	-.53	- 2.39	7.83	4.46	1.48	.14	.15
6 large cities ⁱ	-.74	-10.32	8.29	2.79	1.80	.12	.15
Metropolises and large cities ^j	-.67	- 5.38	8.24	3.03	1.69	.13	.15
Brookings ^k	-.81	- 1.31	10.22	2.60	1.62	.18	.20

* y = Net change in assets and liabilities in per cent of total family income, during schedule year 1935-36, X = Total family income, per year, in \$1,000.

Source: Unpublished material of the *Urban Study of Consumer Purchases, 1935-36*, released to the author by the Bureau of Labor Statistics. Native, white, non-relief families of all occupational groups and family types.

In fitting the curves by the method of least squares, the observed values have been weighted by the number of expenditure schedules completed in the respective income class.

^b Where curve shows no change in assets and liabilities. (Computed.)

^c Where curve shows 2 per cent of income saved. (Read off from the curves.) The choice of this point is arbitrary except for the consideration that there should be a common point of departure in illustrating the variation of the income elasticity of savings in different cities.

^d At the income shown in column 6.

^e \$2,376 is the average income of an American metropolitan family, as computed from data for metropolises and large cities in the National Resources Committee's publication *Consumer Incomes in the United States, 1938*, Table 7, p. 23.

^f Per cent change in amount of savings—or deficits—if income increases by 1 per cent.

^g Decrease of deficits in dollars if income increases by \$1.00.

^h Average representative of cities with population of 1,500,000 and over, computed from data for New York and Chicago. Weights: Number of native, white families in New York, and in Chicago, Detroit, Philadelphia together. (Source: *Fifteenth Census of the United States: 1930*, vol. vi, Table 63.)

ⁱ Average representative of cities with population of 100,000 to 1,500,000, computed from data for six large cities listed above. Weights: Number of native, white, non-relief, "normal" families in large cities of the respective region, according to a communication of the National Resources Committee.

^j Average representative of cities with population of 100,000 and over. Weights: Number of native, white, non-relief, "normal" families in each group of cities. Source as under ⁽ⁱ⁾.

^k This curve was fitted to the data published by the Brookings Institution in *America's Capacity to Consume, 1934*, p. 261. Income range: \$0-20,000. The figures are for non-farm families and are based on budget studies undertaken between 1918 and 1930. (*Ibid.*, pp. 68, 72 and 79.)

But it seems probable that tests of significance will not cast any doubt on the position of New York with respect to each of the other cities. By means of an analysis of variance, we have tested the significance of the difference between the income-savings regressions for New York and Chicago.

TABLE II—ANALYSIS OF VARIANCE

Source of variation	Sum of squares	Degrees of freedom ^a	Mean variance
(1) Difference between regressions for New York and Chicago	159.54 ^b	$n_1 = 3$	53.18
(2) Residuals from regressions for New York and Chicago	118.93 ^c	$n_2 = 30 - 6 = 24$	4.96
(3) Residuals from regressions for metropolises (New York and Chicago combined)	278.47 ^d	$N = 27$	—

^a For New York and Chicago we have 15 observations each. The regression equations contain 3 constants.

^b Computed as residual between rows 3 and 2.

^c Sum of squares of deviations of New York points from New York curve and of Chicago points from Chicago curve.

^d Sum of squares of deviations of New York and Chicago points from average curve.

The value of F turned out to be 10.72. The probability for so high a value of F being reached by chance is less than 1 per cent.

As far as the intercity differences can be taken as sufficiently warranted, a series of explanatory factors may be advanced. Differences in cost of living, *i.e.*, in total expenditure for obtaining a certain level of well-being, are bound to exert an influence. Second, if the choice of available goods is different, *e.g.*, larger in New York than in any other of our cities, and if the preference system of people is not the same, as again is probably the case for a comparison between New York and the other cities, the amount of savings—or deficits—at a given income is likely to vary. The outstanding position of New York seems largely due to its different cost and "amplitude" of living.⁷ Other influences may come from different compositions of the population with respect to occupation and age, differences in the weight of various family types, differences in the economic trend and level of the particular cities, etc. Some of these factors are measurable, and it is planned to analyze their influence in the future.

There can be no doubt that among the factors influencing savings, income is outstanding in importance. Table III gives the indexes of deter-

⁷ According to the study of Margaret L. Stecker (*Intercity Differences in Costs of Living in March, 1935, 59 Cities*, WPA, research monograph 12, Washington, 1937), the cost of a "maintenance level" budget for our 8 cities is highest in New York (\$1,375), lowest in Columbus (\$1,179).

mination, or the percentages of variance of savings explained by the income factor.

The percentages of variance explained by income are high. It must, however, be noted that they concern the variance of *average* savings *per income class* and not the variance of *individual* family returns. *Within* income classes, savings of individual families generally show higher variability than expenditures on groups of commodities like food, clothing, medical care, etc. In this study, no account could be taken of the variability

TABLE III—GOODNESS OF FIT OF CURVES

	\bar{r}^2
New York	.71
Chicago	.97
Providence	.90
Columbus	.97
Omaha	.96
Portland	.96
Denver	.94
Atlanta	.95
Brookings	.99

of savings within income classes, since it was not possible to analyze several hundreds of individual family returns per city. The above indexes of determination tell us only: if families are grouped in (14-15) income classes, the class average of the percentage of income saved can be so closely approximated by a simple function of income that little room is left for the action of other factors.

Turning to the income elasticities of deficits, we find that at an income of \$650, deficits are clearly inelastic with respect to income changes: If income increases by 1 per cent, deficits decrease by less than 1 per cent, in New York even less than $\frac{1}{2}$ per cent. For families of so low an income, the deficit is an inelastic item. If income rises, they are not willing to reduce the deficit correspondingly but improve their plane of living; if income falls, they increase their deficits relatively less but reduce consumption strongly. They do not stick to a certain minimum plane of living, a fact which we shall have occasion to express still more clearly. At \$1,300, deficits have become elastic. For most of the cities, we are now near the "break-even" point. Though the rate at which deficits decrease with rising income is still pretty slow, the elasticities turn out high, for in computing the elasticities those small decreases are related to tiny absolute amounts of deficits. The increasing income elasticity of deficits with rising income (and falling amounts of deficits) quite logically indicates that families find it the easier to eliminate a budget deficit the smaller it is. It might be said that deficits are a "necessity" ($\eta < 1$) for families with very low incomes,

but become a "luxury" ($\eta > 1$) if income approaches an amount sufficient for covering the desired level of consumption.

The income elasticity of savings starts with high values, when we have crossed the "break-even" point. Savings appear as a "luxury." For all cities, savings remain elastic until the upper end of our income scale, but the elasticity decreases with rising incomes. This confirms Mrs. Gilboy's general findings.⁸ With the help of our income-savings functions, it is however possible now to follow this decrease in detail and to state that it is very rapid at the beginning, becomes slower the further we advance on the income scale, and finally stops altogether. The elasticity reaches a minimum and starts to increase slightly toward an asymptotic value of 2.⁹ For some cities, the elasticity stops decreasing even before an income of \$10,000 is attained (e.g., for Columbus at \$7,640); for others the minimum lies at higher incomes (e.g., New York, \$16,260; Atlanta, \$30,450). Thus the higher income rises, the less saving is considered as a "luxury." But over the whole of the income range covered, savings never become a "necessity" in the sense that $\eta < 1$. The coefficient of elasticity tends to become stable at a value above 1.

The total decrease in elasticity between the "2 per cent" savings point and \$10,000 is largest in Omaha, least in Atlanta. At the average income of an American metropolitan family (\$2,376), the elasticity is highest in New York (shortly after the "break-even" point), Atlanta, and Chicago; lowest in Columbus, Omaha, and Portland. The ranking of the cities according to the magnitude of the elasticities shifts pretty strongly from income point to income point, a fact which gives a sharp reflection of the slight changes of the curve pattern from city to city.

In connection with the elasticity of deficits, we mentioned possibilities of testing whether people of low incomes stick effectively to a minimum plane of living, or not. It is easy to see that, if they did, a change in income would have to be compensated by an inverse change in deficits. Thus the rate of decrease of deficits with rising income would have to be 1 for the income range where families practise a fixed-minimum-of-existence policy.¹⁰ Furthermore, if such a policy were practised all over the income range where deficits prevail, the theoretical amount of deficit at an income of 0 would have to equal the amount of income at the break-even point.

⁸ E. W. Gilboy, "The Propensity to Consume," *Quart. Jour. of Econ.*, Nov., 1938, pp. 120 ff.

⁹ This decline in the elasticity and the subsequent rise toward an asymptotic value of 2 are bound to appear in all cases where in fitting the curve we obtain positive values for a and b , a negative one for c .

¹⁰ The rate of decrease of deficits discussed here is computed at $(a + 2bX)/100$. It should not be confused with the coefficient of elasticity, $\eta = \frac{aX + 2bX^2}{aX + bX^2 + c}$, which indicates the ratio between *per cent* increases in Y and X .

The figures in columns 12 and 13 of Table I indicate the rates at which deficits decrease with rising income, or the gradients of the tangent to the "amount of savings-income" parabolas (equation 2) at two income levels, \$650 and \$1,300. These rates are throughout much less than 1. Nowhere, below the "break-even" point, can we find a fixed-minimum-of-existence policy existing; and if we go down from an income of \$1,300 to \$650 we even find a stronger deviation from such a behavior. The deviation is strongest in Atlanta, least in Omaha.

Comparing the theoretical amounts of deficits at 0 income ($c/100$) with incomes at the break-even point, we find that the latter exceed the former five to sixteen times. If Atlanta families, for instance, were able to maintain a consumption expenditure of \$1,580, however short their income might fall of this figure, their theoretical deficits at 0 income would have to be about sixteen times the \$99.80 which the curve actually shows at this level. Among the reasons for this behavior we must count the limitation of available accumulated funds to draw upon—we are in 1935-36—and the limitation of credit. These conditions are likely to have affected the situation of families with falling income. If, on the other hand, income rose, families seem to have preferred attaining—or recovering—a higher level of consumption to reducing the deficit.

The figures in columns 12 and 13 can also be interpreted as measures of the marginal propensity to save or, since we are in the region where net deficits prevail, the marginal propensity to reduce deficits. Since the fitted parabolas are convex upward, the marginal propensity to save increases with income. Using data limited to wage earners in three of our cities (New York, Portland, and Atlanta), Dr. Polak¹¹ came to the conclusion that "contrary to what is often thought there is no evidence at all of a higher marginal propensity to save . . . at a higher income."

This statement seems to be erroneous for all of the eight cities, if all occupational groups and family types are considered together. Even for the wage earner sample taken alone it could only be arrived at if undue weight were given to the lowest income class.¹²

In comparing the average curves for the metropolises and large cities, we find a somewhat reduced picture of the differences between New York and the seven other cities including the metropolis Chicago. The curve for the metropolises lies always under that of the large cities. In many respects the behavior of Chicago resembles the six large cities much more than New York.

¹¹ J. J. Polak: "Fluctuations in United States Consumption, 1919-1932," *Rev. of Econ. Stat.*, Feb., 1939, page 7, note 1.

¹² Data for this class, including families with yearly incomes between \$500 and \$750, must be interpreted with care. Metropolitan families with so low an income normally received relief of some kind in 1935-36. But information on savings and deficits was only obtained from non-relief families. These are likely to be exceptions for one reason or another.

Chart 5 shows the average income-savings relationship for metropolises and large cities together with the relationship between income and the *income elasticities* of savings. The average rate of decrease of the elasticity is 1.8 per \$1,000 of income between incomes of \$2,000 and \$3,500, but only .6 between incomes of \$3,500 and \$10,000. It lies in the nature of this curve that the elasticity reaches a minimum at \$9,300, starts again increasing and approaches asymptotically the value of 2.¹³

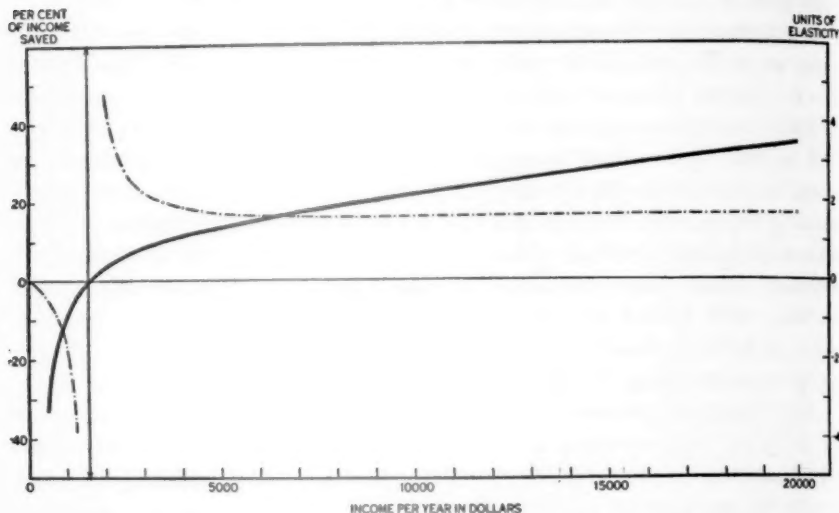


CHART 5: Income-savings relationship for metropolitan families (large cities and metropolises) (—) and its elasticity function (---).

A comparison between our average curve for metropolises and large cities and the curve fitted to the Brookings data (Chart 4) shows a degree of similarity which may surprise some critics of the Brookings estimates. (It is true, that the criticism of the Brookings figures mainly concerned the high income brackets which are here omitted from consideration.) If our curve took account of middle-sized and small cities too, which are supposed to be covered by the Brookings figures for non-farm families, the degree of similarity might be even higher, because families in small cities tend to be more thrifty than those in large ones. Such as it is, the curve for 1935-36 shows, at every income level between \$500 and \$20,000 lower savings, or higher deficits, than the Brookings curve does. With decreasing income the difference becomes, however, smaller and vanishes near \$500 of income.

While up to this point we have dealt exclusively with the variation of

¹³ The formula of the elasticity is (3) $\eta = \frac{aX + 2bX^2}{aX + bX^2 + c}$

family savings under the influence of changing income, we are now going to examine briefly the aggregate net savings capacity, or the per cent of aggregate income saved, of metropolitan, native, white, non-relief families.¹⁴

TABLE IV

Cities	Regions	Aggregate net savings in per cent of aggregate income		
		(1) Income classes up to \$10,000	(2) All income classes	(3) Col. (2) Col. (1)
Providence	New England	5.3	21.7	4.1
Columbus	North Central	9.3	22.2	2.4
Portland	Pacific	6.2	15.0	2.4
Denver	Mountain and plains	5.5	11.2	2.0
Atlanta	South	5.8	11.3	1.9
Average of large cities (weighted by number of native, white, non-relief, "normal" families in large cities of corresponding region)		7.4	18.1	2.4
Metropolises (New York, Chicago)	North Central	3.8	12.0	3.2
Average of metropolises and large cities (weighted by number of native, white, non-relief, "normal" families in metropolises and large cities in the U. S.)		6.2	15.6	2.5

Table IV indicates for the different cities the per cent of aggregate income saved, in column (1) for incomes between 0 and \$10,000, in col-

¹⁴ The per cent of aggregate income saved was computed in the following way. For each of the regions, frequencies and aggregate incomes of families per income class were used. Figures for the frequency distributions, by income level, and of the aggregate incomes received by native, white, non-relief, "normal" families in 1935-36 were furnished by the Consumption Research staff of the National Resources Committee. (These regional distributions are *mainly* based on samples obtained for the cities that are shown in Table IV, for which data on savings were available. For this reason we talk in the following about cities instead of "regions." The procedure followed by the National Resources Committee in establishing income distributions for 1935-36, is described in its publication *Consumer Incomes in the United States*, Washington, 1938.)

From these data average incomes per income class were obtained. The corresponding percentages of savings per income class were computed with the help of our income-savings relationships for the respective cities. These percentages were applied against the aggregate incomes per income class in order to compute the aggregate savings per income class. The percentage of aggregate income saved was established by expressing the total of aggregate savings over all income classes in per cent of the corresponding total of aggregate incomes.

An assumption underlying this procedure is that within a certain income class all families receive the average income.

umn (2) for incomes of all sizes. Taking the income and savings situation in these cities as representative for all large cities in the respective regions, we may conclude: For native, white, non-relief families including husband and wife with or without children and living in American cities of over 100,000 inhabitants, net savings constituted 15.6 per cent of aggregate income in 1935-36; only 6.2 per cent, if families with higher incomes than \$10,000 are omitted.

As column (3) shows, the inclusion of the highest income class, "\$10,000 and more," leads to aggregate savings percentages two to four times higher than those obtained for incomes smaller than \$10,000 alone. The figures in column (2) must however be taken as less reliable than those in column (1): Only for incomes between \$500 and about \$15,000, were data on savings or deficits at our disposal. For these classes, aggregate savings could be obtained by interpolating on our income-savings curves. *Extrapolation* was necessary for the deficit families having smaller incomes than \$500. Errors committed here are, however, not likely to affect the results significantly, because neither the number of families in these classes nor their incomes are important quantities. Errors of extrapolation are of greater importance for the highest income class which, in the different cities, furnished between 7 and 43 per cent of aggregate income. We have no data at our disposal allowing us definitely to determine the direction and numerical importance of the bias present in the percentages of column (2). It seems to the present writer that it is likely to be an *upward* bias, because the savings percentages for incomes above \$15,000 obtained by extrapolation of our income-savings curves are probably too high. (See above, Section II.)

Turning to an explanation of the percentages of aggregate income saved, we can enumerate three theoretical determinants: (1) the average income of the families; (2) the distribution of family incomes; and (3) the community's disposition to save. Table V gives statistical measures of these three determinants.

TABLE V—THREE DETERMINANTS OF THE PER CENT OF AGGREGATE INCOME SAVED

Cities	(1) Average family income	(2) Degree of income inequality R'	(3) Income at the "break-even" point
Providence	3,309	.57	1,580
Columbus	2,691	.46	1,310
Portland	2,267	.41	1,440
Denver	2,284	.40	1,560
Atlanta	2,288	.36	1,580
Metropolises	3,614	.53	1,830

Column (1) shows that there exist considerable differences between families' average income in the metropolises and Providence on the one hand, Atlanta, Denver and Portland on the other hand. Columbus occupies a medium position. Column (2) indicates the degree of inequality of income distributions in the different cities or regions. As measure of the degree of inequality the coefficient of concentration R' has been used, which is due to Corrado Gini.¹⁵ Its value indicates approximately the "average relative inter-individual difference" between the various incomes. On the Lorenz chart the value of R' corresponds to the ratio between the area limited by the diagonal and the Lorenz polygon and the area of the triangle between the diagonal and the axes. Again there appear perceptible differences between our cities. Though the coefficient never approaches the limiting values of 0 (perfect equality) or 1 (perfect inequality), it shows much higher values for Providence and the metropolises than for Portland, Denver, and Atlanta. In Providence and the metropolises the higher income class furnishes particularly high percentages of aggregate income *viz.*, 43 per cent and 40 per cent, a fact which is also reflected by the figures in column (3) of Table IV. Again Columbus occupies a medium position.

The income at the "break-even" point may be considered as a comprehensive and easily understandable though rather rough measure of the community's disposition to save.¹⁶ The higher it is, the lower is the community's disposition to save and vice versa.

It would be possible to determine numerical relationship between the per cent of aggregate income saved and each of the three determinants by multiple regression analysis. The small number of observations, however, led us to discard such a procedure. The results would not be safe enough.¹⁷ Therefore, it was decided to present only the ranking of our cities according to their aggregate savings percentage and the values of the three determinants. This is done in Table VI.

Columbus owes its high aggregate savings percentage mainly to the high disposition to save among native, white families of this city. Providence and the metropolises, though having higher average incomes and a stronger

¹⁵ C. Gini: *Sulla Misura della Concentrazione e della Variabilità dei Caratteri*, Atti del R. Istituto Veneto di Scienze, Lettere ed Arti, T. lxxiii, parte 2, 1913-14, pp. 1203-48. In computing the values of R' simplifications were used that were devised by L. Hersch (lectures in statistics at the University of Geneva, Switzerland).

¹⁶ To the extent that the savings-income curves are parallel, the roughness of this measure cannot be considered as serious for comparing the savings disposition from city to city. The curves are, however, not always parallel, and as chart 2 shows, the most serious deviation from this ideal situation occurs in comparing Atlanta with the rest of the cities. Taking income at the break-even point as a measure of the community's disposition to save, we *over-estimate* Atlanta's disposition to save, as far as the medium classes are concerned, *under-estimate* it for the highest 3 classes. On the whole there appears to result an *under-estimate*.

¹⁷ The author intends, however, to undertake this step in a wider analysis, covering middle-sized and small cities beside metropolises and large cities.

degree of income inequality, fall back behind Columbus, because the savings disposition of their families is lower. But the high rank of Providence and the metropolises according to the two income determinants obviously secures their lead over thriftier Denver and Atlanta. Portland's handicap in income level and inequality obviously does not allow this city to outrank less thrifty Providence in capacity to save.

TABLE VI—RANKING OF CITIES*

Cities	OVER ALL INCOME CLASSES			
	Aggregate savings percentage	Average family income	Degree of income inequality R'	Disposition to save
Columbus	1	3	3	1
Providence	2	2	1	4.5
Portland	3	6	4	2
Metropolises	4	1	2	6
Atlanta	5	4	6	4.5
Denver	6	5	5	3

* Rank 1 is given to the city with the *highest* aggregate savings percentage, average family income, degree of income inequality and disposition to save (*i.e.*, lowest income at "break-even" point).

IV

A final word may be said about what is included here in the concept, savings. Savings, or deficits, are the amount of "Net Change in Assets and Liabilities" established from the expenditure schedules of the *Urban Study of Consumer Purchases*. They comprise payments of life insurance premiums, insurance policies settled or surrendered, changes in savings and checking accounts and other assets, changes in indebtedness, etc., but do not include expenditures for automobiles, furnishings and other durable goods *not used up* during the schedule year. We may call the net change in assets and liabilities an estimate of the "Consumers' Capacity to Save." If we intend to measure the *capital formation* through consumers' savings, a series of corrections has to be applied to our figures. It has to be established; first, whether the cost of insurance proper has been sufficiently eliminated; second, whether some families' excess of expenditures for durable consumer goods over their wear-out during the schedule year is sufficiently counterbalanced by the excess of wear-out over expenditures for such goods by other families in the corresponding income class. Thus, we may find out whether the consumers' capacity to save equals or differs from the estimate.

If we go from the consumers' capacity to save to something which could be called *consumers' effective saving*, we have to deduct from the former

the cost of the various savings handling agencies, banks, insurance companies, etc. Finally, if we deduct the amounts of idle balances held by savers or savings handling agencies from consumers' effective savings, we may obtain an estimate of capital formation through consumers' savings.

For the moment none of these checks and adjustments has been made, so that the relationships here discussed pertain only to an estimate of the consumers' capacity to save.

Another circumstance which should be borne in mind in using these relationships is that the data on which they are based, were obtained by a kind of snapshot of a moving reality. In order to be sure in telling whether an increase of a family's income will raise its savings or decrease its deficits by about so and so much we should have a series of such snapshots for some groups of families. After learning how families really adjust their savings under the impact of changing income we could check the usefulness of our income-savings relationships for the analysis of economic changes. In future budget studies, therefore, an effort should be made to obtain data on family income and savings for a series of schedule years.

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ON THE ALLEGED DOUBLE TAXATION OF SAVINGS

Article is a commentary on Professor Fisher's "The Double Taxation of Savings," published in the March, 1939, *Review*. Central thesis of the article is that the alleged advantage of a taxpayer under a spendings-tax system is illusory, and disappears as soon as total government costs are maintained equal under both tax systems. The initial analysis considers a uniform population of taxpayers all with the same income and the same taxes, and shows that the taxpayer's "advantage" under the spendings tax is identified with increasing public debt and can never be realized by him. Subsequent analysis considers a non-uniform population, shows that savers have extra savings at the expense of non-savers, and indicates that economic or political repercussions or both will surely destroy any temporary or apparent "advantage" enjoyed by savers under a spendings tax.

Professor Irving Fisher has advocated in a succession of articles a tax on spendings rather than on income, and contends that an income tax involves double taxation of savings.¹ In the *Review* article he asserts "there is mathematical proof" of such double taxation. I believe the contrary, and will now attempt to show wherein his indicated mathematical "proof" falls down, and to show in particular that the taxpayer under Professor Fisher's program derives therefrom no real advantage over one who pays an income tax.

1. Essential Factor of Government Cost

The first point I shall discuss relates to what strikes me as a basic unfairness in Mr. Fisher's comparison between two hypothetical taxpayers. One, whom I shall hereafter call A, is in a hypothetical state "New Jersey" having an income tax; and the other, whom I shall call B, is in a hypothetical state "New York" having a spendings tax. The case is presented—and I think it not unfair to assume that Mr. Fisher intended so to present it—as though these two taxpayers started out on an exactly equal footing, except that A lived under a less enlightened tax system than B. I propose now to show that they did not stand on the same footing, and that the comparison between them as presented by Mr. Fisher is correspondingly unfair.

The essential point is that Mr. Fisher's figures imply that A lived under a more costly government than B. To develop this point effectively, I shall begin by assuming that (i) each state—Mr. Fisher's New Jersey and his New York—has the same population, and (ii) the population in each state is uniform in that it is made up exclusively of taxpayers having at the start income and consumption in the amounts specified for A and B by Mr. Fisher. Mr. Fisher will no doubt readily accede to assumption (i), but may emphatically object to assumption (ii). I shall meet this supposed objection later, when I show that abandoning assumption (ii) will not damage the force of my argument. But in the beginning, to facilitate illuminating computations, I make both assumptions.

Mr. Fisher describes A and B as follows: each has in the initial year an

¹ "The Double Taxation of Savings," this *Review*, March, 1939, pp. 16-33; and see also references cited therein.

income² of \$1,125, and consumes \$800.³ A pays a 20 per cent tax on his income, amounting to \$225, and saves therefore \$100. B pays a 20 per cent tax on his amount segregated for personal use, amounting to \$200, and "saves" \$125.⁴

My point now is that Mr. Fisher's data inescapably imply that the government under which A lives has more revenue than the government under which B lives, 12½ per cent more under the assumed numerical conditions.⁵ I submit that this fact is a fundamental defect in Mr. Fisher's comparison of A and B, by which he seeks to show B at an advantage over A. I gladly concede that, if we could secure a cut in governmental expenditures by the simple step of changing from an income tax to a spendings tax, no further argument would be needed in support of Mr. Fisher's program. By all means, adopt the spendings tax, whether or not the income tax involves "double taxation" or any other alleged imperfections. But no practical man will hold that public expenses can be cut by any such simple device, and any fair-minded man should concede that we ought to compare A and B on the assumption that they live under equally costly governments. I propose now to do so.

2. Case of the Uniform Population

For this purpose, as is so often true in matters involving accounts, one must look at both sides of the transactions under study; we must examine

² Mr. Fisher apparently has in mind what he calls "earned income"—not to be confused, as he defines it, with the term as popularly used to mean income from personal services, or with the very special definition given by current federal revenue acts in allowing a deduction for the reckoning of normal tax. Mr. Fisher's "earned income" seems to mean the income—the year's accretion—from an existing savings fund or investment of the taxpayer. So far as the argument is concerned, it might as well be a salary. Either source of the \$1,125, or a combination of such sources, is acceptable in my argument; the essential point for his argument and for mine is that the \$1,125 would be taxed under an "income" tax system.

³ This is stated differently by Mr. Fisher; but I think there can be no question that A, or B, each "spends" \$800 of the \$1,000 which Mr. Fisher says is segregated "for immediate personal use." Another implication of his terminology will, however, be noted below.

⁴ I shall in general hereafter refrain from putting the word *save*, in its various forms, in quotations whenever I speak of B as the saver; but I here remark that a central point of my argument will be that B does *not* truly save all of the \$125 or of the successive installments of interest thereon as reckoned by Mr. Fisher, and I condescend to use his term without quotation marks only to avoid complicating the text.

I further remark at this point that the tax which Mr. Fisher describes as 20 per cent on B's \$1,000 might in practice have to be levied against the actual spendings (\$800) for direct consumption by B and would then read 25 per cent. B's tax burden would be unchanged, it would merely be a question of administrative convenience; and Mr. Fisher's special tax form for his spendings tax can provide for a reckoning on the 20 per cent basis.

⁵ This of course neglects the possibility that each government has other sources of revenue than the taxes under discussion, and that A's government has less revenue from such other sources than B's government; but I suspect Mr. Fisher will concede that fairness requires us to exclude this possibility of a differential (in other revenue) favorable to B's government, and the easiest way to do so is to regard all government revenue as coming from the taxes under examination.

the government's records as well as the citizen's records. Certain notations will be helpful: A's government is Ga, B's government is Gb, the initial year about which we have thus far been talking is Year O, successive years are numbered serially. Furthermore, we shall assume that the earned income of each citizen in Year O comes entirely from investments, such earnings being at the rate of 5 per cent, and the capital fund at the beginning of Year O being therefore \$22,500 for each taxpayer.⁶ Finally, we assume a uniform rate of interest, on all the investments, fixed over time at 5 per cent, the figure used by Mr. Fisher. I do not here go into the intricate question

TABLE I—FINANCIAL STATEMENTS FOR THE CITIZENS AND THEIR GOVERNMENTS
(PER CAPITA BASIS) IN YEAR O

	A	B	B'
Investments, Jan. 1	\$22,500	\$22,500	\$22,500
Income (5%)	1,125	1,125	1,125
Spent for consumption	800	800	800
Taxes ¹	225	200	225
Savings	100	125	100
Investments, Dec. 31	22,600	22,625	22,600
¹ Tax base	1,125	1,000	1,025
Rate (%)	20	20	21.95
	Ga	Gb	Gb'
Debt, Jan. 1	\$ 0	\$ 0	\$ 0
Revenues	225	200	225
Expenditures	225	225	225
Deficit	0	25	0
Debt, Dec. 31	0	25	0

as to the probable effects of the alternative fiscal policies upon the rate of interest, but we merely note that this assumption is somewhat unreal and may falsify somewhat the computed comparison between A and B.

For Year O, we can now present (Table I) the essential balance-sheet and income-account items (all government figures being on a per capita—really, per taxpayer—basis). The first two columns report the accounts as already discussed, and the third column will be explained presently. As already emphasized, fairness as between A and B requires us to assume that governmental costs per capita are the same for Ga and Gb; and I have taken them at \$225, which just balances the budget of Ga.⁷

⁶ If the earned income were from personal services, such as salaries, certain changes in the balance-sheet figures of my tables would be needed; but the force of my argument would in no sense be altered. I shall wish later, however, to give limited attention to the salary case for a specific part of the discussion.

⁷ Some other level of expenditure could, of course, be assumed; but the resulting computations would become unavoidably more intricate without in any way altering the conclusions. Likewise we could assume that the governments were already in debt (or had

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What do we find? B's extra "savings" of \$25 are exactly matched by Gb's new debt of \$25! Faced with this outcome, B *may* have the courage and foresight to demand that his legislature levy additional taxes to balance the budget—we shall then call him B'. Such taxes will of course be levied on his spendings—he will be too proud to suffer a levy against his "savings," for that would be double taxation. Hence the rate of the spendings tax must go up, from 20 per cent to 21.95 (approximately).⁸ The accounts are shown in the third column with headings designated by primes. B' now pays the same tax as A, and has the same savings, \$100. Financially, he is in precisely the same situation as A at the end of Year O; psychologically, he can still enjoy the knowledge that his taxes are "on" his spendings.

The reader may suggest one more alternative by which B can keep his \$125 of savings and still have a government with a balanced budget. This is for him to cut his personal expenses to \$775, but this is ruled out because we are keeping A and B on a par in respect of their consumption.⁹

We can now pass on to the developments of immediately ensuing years, as shown in Table II. I no longer show the figures for the B' case, the case in which B endures additional tax in order to balance Gb's budget. In that case, B' in every year pays taxes on a somewhat higher base (\$1,025 instead of \$1,000) and at a somewhat higher rate (21.95 instead of 20) than he otherwise would, but in all other respects his figures in each year are like those of A, *not* those of B, and his government's figures are like those of Ga, *not* those of Gb. But the real B, who in Year O "saves" \$25 extra and whose government runs a deficit, is compared with A in Table II.

For this purpose, I find it convenient to make a somewhat different assumption concerning the course of ordinary public expenditures (excluding interest on the public debt) than is implied in Mr. Fisher's numerical illustrations. His illustration shows A's taxable income—the original \$1,125 annually plus the interest on his new increments of savings—rising in each year; and with Mr. Fisher's assumed steady tax rate of 20 per cent on income, this implies a rising amount of taxes, with which—on the assumption that we just keep Ga's budget balanced—there would be a rise in ordinary government expenses for Ga. I find it convenient, for

a surplus) at the beginning of Year O, but this is avoided for the same reason. Obviously, fairness suggests that we assume the government debt situation identical for Ga and Gb at the beginning; although my analysis will show that, if Mr. Fisher's tax program already had been in force, Gb would be more deeply in debt than Ga.

⁸ This rate is calculated on the base as used by Mr. Fisher—the actual spendings plus the tax itself. If it were calculated on the spendings as base (see footnote 4), the rate would have been raised from 25 per cent to 28.13 (approximately).

⁹ I shall, however, at a later point consider this aspect of the matter—B's foregoing some of his direct personal consumption in order to pay for government.

the calculations, to assume rather that ordinary public expenses remain fixed at \$225 in each year. This implies successive annual reductions in A's tax rate, as shown in the table, because his tax base rises successively.¹⁰ One other assumption is made: that the public treasury pays the same interest rate as A and B earn on their investments, 5 per cent. Consideration of the effect of relaxing this assumption—for example, by letting the Treasury borrow more cheaply than private debtors—is taken up below.

We have then the picture for Year 1. A's tax rate is lowered; but he

TABLE II—FINANCIAL STATEMENTS FOR YEARS 1 AND 2

	Year 1		Year 2	
	A	B	A	B
Investments, Jan. 1	\$22,600	\$22,625	\$22,705	\$22,756.25
Income (5%)	1,130	1,131.25	1,135.25	1,137.81
Spent for consumption	800	800	800	800
Taxes ¹	225	200	225	200
Savings	105	131.25	110.25	137.81
Investments, Dec. 31	22,705	22,756.25	22,815.25	22,894.06
¹ Tax base	1,130	1,000	1,135.25	1,000
Rate (%)	19.90	20	19.81	20
Debt, Jan. 1	Ga \$ 0	Gb \$ 25	Ga \$ 0	Gb \$ 51.25
Revenues	225	200	225	200
Expenditures:				
Ordinary	225	225	225	225
Interest	0	1.25	0	2.56
Total	225	226.25	225	227.56
Deficit	0	26.25	0	27.56
Debt, Dec. 31	0	51.25	0	78.81

pays the same amount as before in taxes, \$225. B's tax rate remains fixed; and he pays the same amount as before in taxes, \$200. B "saves" \$26.25 more than A, and this is precisely the amount by which B's government goes further into debt. Likewise in Year 2, B saves \$27.56 more than A, and Gb goes further into debt by precisely that amount. Moreover, at the end of each year the total public debt of Gb exactly equals the excess of B's investments over A's investments. And this will continue to be true for every year, as far into the future as we care to extend the computations. B's "advantage" over A is precisely, and nothing else except, the amount (per capita) of B's government's debt. Perhaps we

¹⁰ The analysis can, however, be worked out on a plan which keeps A's tax rate at 20 per cent, and allows ordinary government expenses to rise. The only material result is to increase the speed with which Gb goes into debt. So far as my argument is concerned, it matters not which basis is used—or whether we use any other assumed basis for ordinary public expenditures, provided only we make them identical for Ga and Gb.

could have seen this without all the arithmetic; but, if Mr. Fisher saw it, he failed to bring it to our notice.

We need only one more step in this part of the argument. Suppose Gb finances its deficits by selling bonds to its citizens, and that each citizen takes up his exact share of such bonds.¹¹ At the end of any year whatever B now has his investments in two parts: a part just equal to A's investments and a part equal to B's share in Gb's debt. The first part of B's holdings, and all of A's, are in non-governmental securities. The second part of B's holdings—his excess, or "advantage," over A—is in the bonds of Gb.

Has this second part of B's investments any value to him? He can *never* derive any income from it—unless and until he is willing to suffer an increase in taxes which, though they may be *levied* upon his spendings, will surely *fall* upon his savings. Every year, though the Treasury bonds contract to pay him an income, he has no control over or enjoyment of that income. He must accept in its stead new Treasury bonds, at the same time that he is also accepting new Treasury bonds for the extra \$25 of his "savings" in the then current year. B can never realize on the principal of the bonds through their being paid off at maturity; if indeed they have a maturity, Gb has no recourse except to substitute at maturity new bonds for the old. B cannot sell the Treasury bonds to any intelligent purchaser without entering into a contract with such purchaser to tax himself so that the purchaser can actually realize some cold cash income from the bonds. B can, and must, hold the bonds to the end of his days without ever having true possession either of the principal or the interest; and he can then pass them on to his heirs, subject to the same nullifying restrictions. B has in these bonds nothing but a paper asset which is totally worthless, because it can "yield" nothing except as he himself pays the said yield—dollar for dollar—out of his own pocket through additional taxes. Such additional taxes will exactly cancel the "yield" of the bonds, and B will remain as before: he gets *no* income from the bonds.¹² Like-

¹¹ How else finance Gb's deficit than by selling obligations to its citizens? No "outsider," foreign or otherwise, will intelligently buy such bonds so long as he knows that B is unwilling to be taxed to pay interest thereon and that the bondholder must therefore take his interest in the form of new bonds. One other recourse is possible: Gb, which may have control over its banking system, may force the banks to buy bonds—"force" because no bank will voluntarily buy an asset the "yield" of which is to be paid in new obligations. On bank purchases of the bonds, I comment only to say they may spell inflation and all that it means for B's investments, unless we visualize the banking system as acting merely as an investing agent for B in which case the argument in the text applies.

¹² We now see the implications of a possible lower rate of interest on Treasury bonds than on other investments. Even if the Treasury can issue bonds at less than 5 per cent, no favorable consequence ensues for B—he does not thereby become able to *realize* on the interest coupon except by taxing himself to the full amount thereof. Moreover, as he holds the bonds, it is still true that the government deficit each year exactly equals B's extra "savings." B no longer earns 5 per cent on *all* his investments, but something less. Furthermore, the Treasury cannot sell its low-rate bonds to somebody other than B, for reasons stated in the text.

wise, if Gb retires and pays off some or all of the bonds through new taxes, B pays precisely the same money in the new taxes as he receives for his called bonds. He can in truth *never* realize upon either principal or interest from the bonds, and might as well never have possessed them.

The cold-blooded fact is that B never truly *saved* that extra \$25 back in Year O, and similar amounts in succeeding years. He *consumed* that \$25 of his income in the form of government, just as he consumed the other \$200 of government, which consumption was financed by a tax on his spendings. Here, we may remark, is a significant implication of the base (\$1,000) for Mr. Fisher's spending tax (see footnote 4): that base *does* include B's direct personal consumption (\$800) and also \$200 of government which he consumes. But it fails to include the other \$25 which he consumes (on the other hand, the spending-tax base of B', in Table I, does include all the government consumed by B').¹³ B, like the citizens of every other nation who consume more government in any one year than they can or will finance out of their current incomes, is suffering under a dreadful delusion if he thinks such excess consumption of government constitutes "savings" to himself.

Where then is B's "advantage" over A? And is A a victim of "double" taxation?

3. Case of a Non-Uniform Population

My analysis thus far has rested upon a highly artificial assumption, that the population is uniform in that all its members are exactly like the typical B. Mr. Fisher may contend that in a real population, with varying economic circumstances among its members and varying proportions saved from their respective incomes, there need be no such plunge into government debt as I have described. He may contend that the very purpose of his tax program is to shift the tax burden from savers to non-savers—or perhaps he will insist on saying from saved income to spent income, but this is immaterial as my argument will be on this second basis. I now consider a much more realistic case—of a population composed of members with varying ratios between savings and income; and, although numerical analysis is possible only if I choose a special case, I submit that my case is sufficiently general to meet the objection effectively.

¹³ Objection may be raised against my term "consumption" of government, but I am confident the term is appropriate. The only objection worthy of consideration is that some government expenditures are for so-called "investment." I shall not here comment upon the tiresome arguments by which many and various particular government expenditures are dignified by calling them investments. Some public expenditures may exist which are true investments in that they afford a return which becomes tangible as revenue to the public Treasury. With respect to these admitted cases, I merely assert that fairness in comparing A and B requires us to assume Ga has as much revenue from productive investments of this sort as Gb. That being assumed, my comparison between A and B stands. The further possible objection to my term consumption, that in a non-uniform population savers might consume less government than non-savers, will be discussed below.

I might assume the population to be made up of adults as follows: 10 spend 20 per cent more than their incomes, 20 spend their incomes in full, 40 spend 90 per cent of their incomes, 20 spend 70 per cent of their incomes, 5 spend 50 per cent of their incomes, 4 spend 10 per cent of their incomes, and 1 has income but lives as a "dependent" without spending.¹⁴ But I think all readers will agree that this is unnecessarily realistic, and that sufficient non-uniformity for testing the basic point at issue can be achieved by assuming a less complicated case. Readers will thank me for sparing them unnecessary arithmetic; and I have perfect faith that any reader who wants to indulge in the more intricate computations, and will apply a parallel analysis to a more complicated population, will reach the same conclusions as I do about the basic issue. I therefore assume the following population: 40 spend their incomes in full, 50 save 10 per cent of their incomes, 10 save $18\frac{3}{4}$ per cent of their incomes; and citizens in these three groups will be called X, Y, and Z, respectively. The assumptions are for Year O, and the ratios—0, 10, and $18\frac{3}{4}$ per cent—for savings are after an *income* tax which supports a government costing \$400 per citizen in Year O.

I further assume that the government budget is to be balanced in Year O, even after a change in tax system. I suspect Mr. Fisher may welcome this assumption, in view of my Section 2; and, in any case, the reader will find that failure to balance the budget with the new tax system—whereas it is balanced under the old (income) tax system—will reinforce my conclusions. Under the old tax system, the Year O accounts appear as in the top section of Table III. We continue to use the symbol *a* to designate taxation under the old system, and shall use *b* to indicate the situation under a spendings tax. The account for the government is not shown; it includes merely revenues of \$40,000 and expenditures in the same amount.

The reader will observe that no balance-sheet figures are included. I am no longer treating the income of taxpayers as coming from an existing investment fund—it may come in that way, or part or all of it may come from wages and salaries, so far as the analysis is concerned. Finally I have assumed lack of uniformity in income, as well as in percentage of income saved, for this in line with real conditions in actual populations.¹⁵

We suppose now that, for the existing income tax, a spendings tax is substituted in Year O; and we remember that we are arranging to maintain

¹⁴ This final "dependent" class does not of course include the great mass of dependent minors existing in a real population and generally having no income. I leave them out by speaking only of an adult population, which seems to me not unfair, as we are interested in a population of actual or potential taxpayers.

¹⁵ The analysis can, however, be tested on the assumption that each of the 100 taxpayers gets the same income—or on any other assumption as to size distribution of income—and the results may differ numerically from mine but will nevertheless point in the same direction and lead inexorably to the same conclusion.

a balanced government budget. The accounts on this new tax basis are shown in the lower section of Table III (here the various items are rounded to the nearest dollar, as presented but not as calculated). I note that the tax rate is figured on the tax base used by Mr. Fisher—the actual spendings plus the tax.¹⁶

What do we find under the new tax system? An actual increase in savings, with corresponding decrease in taxes, for 10 citizens Z. A small

TABLE III—YEAR O ACCOUNTS FOR A NON-UNIFORM POPULATION

	Individuals			Aggregate			Total
	Xa	Ya	Za	Xa	Ya	Za	
Income	\$1,000	\$4,000	\$16,000	\$40,000	\$200,000	\$160,000	\$400,000
Spent for consumption	900	3,200	11,400	36,000	160,000	114,000	310,000
Taxes ¹	100	400	1,600	4,000	20,000	16,000	40,000
Savings	0	400	3,000	0	20,000	30,000	50,000
¹ Tax base	1,000	4,000	16,000	40,000	200,000	160,000	400,000
Rate (%)	10	10	10	10	10	10	10
Income	Xb	Yb	Zb	Xb	Yb	Zb	Total
Spent for consumption	\$1,000	\$4,000	\$16,000	\$40,000	\$200,000	\$160,000	\$400,000
Taxes ²	900	3,200	11,400	36,000	160,000	114,000	310,000
Savings	116	413	1,471	4,645	20,645	14,710	40,000
	-16	387	3,129	-645	19,355	31,290	50,000
² Tax base	1,016	3,613	12,871	40,645	180,645	128,710	350,000
Rate	11.43	11.43	11.43	11.43	11.43	11.43	11.43

decrease in savings, and corresponding increase in taxes, for 50 citizens Y. Negative savings, incident to an increase in taxes, for 40 citizens X. The whole society saves just as before, \$50,000. But Z gets new savings, secured through reducing Y's savings, and forcing X into debt (or into drawing on his accumulation of savings before Year O).

If we were to follow this into the future, always keeping the government budget balanced, the disparity would become progressively worse—and at an accelerating pace because of the operation of compound interest and of the annuity principle involved in the successive annual installments of savings shifted to Z. X goes into deeper and deeper debt, Y has successive

¹⁶ The rate as stated—11.43 per cent (approximately)—would stand as 12.90 (approximately) if the spendings alone were taken as base.

I observe that no consideration is given here of progressive rates. Mr. Fisher's article does not make clear whether he contemplates a graduated tax on spendings, though one passage in the article suggests he may have graduation in mind. I do not believe graduation would alter the force of my argument; but, if Mr. Fisher thinks differently, I shall be glad to test such a case—always understanding that similar treatment shall be accorded "a" and "b" in the comparison between them.

annual savings which increase with painful slowness,¹⁷ Z waxes ever fatter on what he withdraws from the others.

What are the consequences to Z? First is the political fact that, even if X and Y—the majority of the population in a nation which presumably professes to enjoy democratic government—consented to the arrangement in Year O and for some years thereafter, the worm would turn; and Z would sooner or later be taxed in deadly earnest on his "extra" savings or the "yield" thereof or both.¹⁸ Second is the economic fact that such a forcing of debt upon many citizens and withdrawal of their savings from many others would inevitably upset the nation's economy to the great disadvantage of Z who is above all an investor. Does Z derive any "advantage" from a tax system which produces these results?

Mr. Fisher may urge that I am unfair in assuming that Y will take the new taxes out of savings, and that X will take them out of prior savings or out of borrowings. Should not Y and X cut living expenses, the former to maintain his savings at the previous rate, the latter to avoid borrowing? Such an operation implies a cut in consumption for X and Y, and hence for the whole nation.¹⁹ In this case total national saving will indeed be increased—"encouraged" by the new tax system.

The political and economic implications will be in the same direction as those already mentioned, though they may take different specific forms and different intervals of development. X and Y will sooner or later insist, or irresistible economic events will bring it about, that Z be given the burdens he avoided in Year O. Z's whole experience with the tax system will leave him with no advantage, and may do him vastly more harm than would just offset his supposed gains.

Again, I pose my questions. Does B have an "advantage" over A? And is A the victim of "double" taxation?

The foregoing argument has been directed to Mr. Fisher's purported mathematical proof, and I have sought to show that he cannot *prove*

¹⁷ Strictly, with the tax rate, interest rate, and initial income for Y as assumed, Y will have this experience and will continue to accumulate savings (\$389.07 in Year 1 instead of \$387). But, with a slightly higher tax rate, or slightly lower interest rate, or for a Y with income slightly lower than \$4,000, we should find Y's savings smaller in Year 1 than in Year O, and successively smaller until he also would begin to draw down previous savings and ultimately go into debt.

¹⁸ In the whirl of political reprisal, it will help Z none to contend that X and Y were the chief "consumers" of government, that their actual taxes on spendings reflected their share in the total consumption of government. Even if he adduces facts with respect to particular public expenditures, arguments will be brought forward concerning his stake in the maintenance of stable government even by relief and other hand-out expenditures. And an indignant populace cares naught for facts in any case.

¹⁹ This means the tax *rate* must be raised, for Z as well as the others; but I shall not develop this point.

double taxation by arithmetic, and to show also that a taxpayer under a spendings tax has no long-run advantage over one under an income tax. The basic theoretical question as to the existence of double taxation seems to me not answerable on arithmetic grounds. It is perhaps not unfair to say that the whole matter depends upon definition, and its bearing upon a tax program falls little short of question begging. Whether double taxation exists is a question of whether discrimination against savers exists. Proponents of a spendings tax may insist that such discrimination does exist under an income tax; but may not proponents of an income tax equally contend that discrimination against non-savers exists under a spendings tax?

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COMMUNICATIONS

A Further Note on the Double Taxation of Savings¹

Similar to previous formulations of the argument by J. S. Mill, Professor Pigou and others, Professor Fisher's recent case for the exemption of saving outlays from the income tax base rests on the charge of double taxation.² Before defending the income tax against this charge we note that the case for or against the inclusion of savings cannot be decided on the ground of equity considerations only. If a heavier tax incidence on savings should be desired on grounds of policy considerations, double taxation, though perhaps disadvantageous from the equity point of view, would become advantageous and establish a case for rather than against the retention of a broader income tax base.

"Double taxation," an ambiguous and easily abused term, may, for present purposes, be defined as taxation whose incidence results in an unintentionally discriminatory burden. The point of issue is whether the general income tax involves a hidden discrimination against income from saving or whether, on the contrary, Professor Fisher's spending tax results in an analogous discrimination in favor of saved incomes.

We first consider the problem under the assumption of equal incomes and equal saving-spending habits of the various income receivers. A given percentage tax on all income will yield more revenue and hence impose a heavier tax burden upon the community than a similar percentage tax on incomes after the deduction of savings. A double taxation problem, in the sense of inter-individual discrimination does not arise in this instance, due to the assumptions of equal incomes and saving-spending habits. As applied to different types of income the double taxation issue still exists but may be dealt with under the next set of assumptions.

We secondly assume equal incomes but varying saving-consumption ratios for various income receivers.³ Now compare a case A where we have a general income tax, with a case B, where we have a spending tax yielding the same total revenue. Under B the "savers" (people who save and invest a large part of their income) are better off, relative to the "spenders" (people who consume a large part of their income) than they would be under A. While this is true, it fails to prove that under A the savers are the victims of undue double taxation. The existence or non-existence of double taxation is, we believe, a theoretical problem, not a matter of arithmetical proof or disproof. The following points are made in support of the contention that no double taxation prevails:

(a) The original income received and taxed in period I is, after its investment, crystallized in the invested capital sum. At any later date it may be withdrawn and transformed into consumption income *without* suffering a second tax deduction. The original income is thus taxed but once, whether or not consumption has been delayed. This holds no matter whether the income is taxed before investment or, as Professor Fisher suggests, the tax is imposed after disinvestment has occurred.

¹ The argument presented in this note has in part been stated previously by C. W. Guillebaud in "Income Tax and Double Taxation," *Econ. Jour.*, September, 1935, and later by H. C. Simons in *Personal Income Taxation*, pp. 89 ff. In view of Professor Fisher's recent article a restatement and further clarification of the issue appears desirable.

² Fisher, "Double Taxation of Savings," *Am. Econ. Rev.*, March, 1939.

³ A third set of assumptions of unequal incomes and varying income-saving ratios may be distinguished. The discussion of this case is omitted since it is analogous to the above treatment under the second set of assumptions.

(b) As distinct from the original income which at any time may be recovered tax-free by way of disinvestment, the income from investment accrued during period II constitutes a new and additional income. Notwithstanding the merits of Professor Fisher's income concept for purposes of general theory, we find no necessity to use the same income concept for all purposes. The investment of the original income is made and found profitable from the point of view of time preference, in anticipation of the *net* interest return. From the individual's point of view—and this is the relevant factor if we consider his capacity to pay taxes—there is no difference between such interest income and, say, a wage income. The tax on interest is thus not a duplication of the taxation of the original income in period I. Whether in the light of capital theory the capital value is derived from its income, or *vice versa*, is an interesting but altogether different problem.⁴

(c) Lastly a comparison of the results of taxes on income and taxes on spending is relevant. We begin with the assumption that the originally invested income is disinvested at a later point, and shall subsequently consider the case of continued investment. Under Professor Fisher's scheme, taxation of the original income takes place at the time of its later disinvestment. If the original income is hoarded, rather than invested, it is irrelevant which method of taxation is applied. In either case the same percentage tax will be imposed upon the same capital sum; since no interest has accrued, the difference will be one of timing only. If the original income is invested, a given percentage tax on income will over the period from income receipt to disinvestment bear harder on the "saver" than a tax payable at the time of disinvestment yielding the same amount. The cause of the excess burden on the saver lies in his loss of interest, resulting from the tax-reduction of the original income before the investment was made.

From a logical point of view Professor Fisher's statement that the income tax discriminates against savings is no more valid than the opposite contention that the spending tax discriminates against spending. If, however, the problem is considered one of individual capacity to pay taxes rather than one of logic, the general income tax is superior. The additional burden upon the saver is justified: the saver, when investing his original income *did* experience an addition to his economic capacity, independent from later interest receipts. The case for the income tax is further strengthened if the investment of the original income is assumed to continue. Under Professor Fisher's scheme no tax would be collected under such a condition. The range of income tax brackets would be narrowed enormously; a miserly millionaire may well fall into a lower spending bracket than an extravagant middle-class income receiver. Such procedure would fail to produce a fair appraisal of the individual's tax-paying ability which is dependent upon additions to capital reserves as well as upon additions to income.

As pointed out initially, equity considerations form but part of the problem. Professor Fisher's spending tax stands in direct contrast to the opinion, expressed by a growing group of economists, that a shift of the tax burden from consumption to saving appears desirable in so far as this is feasible without producing deterrent effects upon investment. The spending tax, while certain to encourage saving, is much less certain to encourage investment and is hence apt to widen the gap between the propensity to consume and the inducement to invest.

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⁴ Cf. C. W. Guillebaud, *op. cit.*, p. 490 and H. C. Simons, *op. cit.*, pp. 89 ff.

Monopolies and Labor Regulation¹

The economic effects of wage-hour regulation have not been especially integrated into the analysis of imperfect competition. At least one major departure from this generalization is to be found in the work of Professor F. Zeuthen. In his *Problems of Monopoly and Economic Warfare*² he considers, among other more relevant and more important problems, the possible relation between "higher wages and increased consumption of the workers." At this point in his treatise Professor Zeuthen is concerned with a problem which might be defined as follows. "Under what conditions will an increase in purchases for the output of a given monopoloid firm (or industry), arising out of an increase in wages offset the loss in purchases resulting from higher prices (i.e., higher costs)?"

Professor Zeuthen's analysis of this question is divisible into two parts. First he concludes that a greater numerical inelasticity of demand for the product will result in a greater constancy of quantity demanded after the wages (and prices) are raised. The second part of the analysis argues that increased wages will give rise to increased production (and employment) only if a relatively large proportion of the wage increase is spent on the selfsame goods the workers produce. This extra expenditure may be viewed as a real increase in demand. Such a situation of inelasticity of demand for the product by the non-producer buyers, and great willingness of labor to spend its extra income on the product, is according to Zeuthen probably rarely met. Historically, such a combination of inelasticity plus an increase in demand arising directly out of a wage increase might have obtained in the sale of Ford automobiles, before competition became severe. When Ford represented virtually the only inexpensive motor car, one might have expected "a very great proportion of the wages, beyond a certain limit to be spent on the purchase of Ford cars."³

Zeuthen's case, in which an increase in the wages bill of a monopolist (or an entire competitive industry) will be accompanied by an increase in employment and production, is in effect the case in which the demand for the product of the firm or industry increases as a result of the higher wages within the firm or industry. The logical validity of this contention is not beyond criticism. The remainder of this note will attempt to show that Zeuthen's construction is too limited, since a policy of high wages might cause an increase in output and employment quite regardless of the shifts of the demand curve. On the other hand, under certain conditions an increase in demand might actually be followed by a decrease in the output of the monopolist.

The following argument will be based on the assumption that the demand for the output of a monopolist is elastic, and the elasticity of demand tends to increase as the lower price ranges are reached.

For simplicity let us assume that the only variable cost of the monopolist is the labor cost, and that, before the wage-hour regulation is instituted the 40 hour week is observed. With these assumptions in mind, we may ask the question, "What will be the likely effect on output and employment of a monopolist

¹ The writer wishes to express his thanks to the Rockefeller Foundation for providing the leisure to prepare this note. The positive conclusions were originally formulated in an entirely different form by the author, in a portion of a study on the *Social and Economic Effects of the Shorter Work Week*, which he helped prepare for the International Labor Office.

² Routledge, pp. 127 ff.

³ *Ibid.*, p. 129.

if, by governmental fiat or by trade-union regulation the work week is cut to, say, 30 hours *while weekly earnings per worker remain unchanged?*" Ruling out any advantages due to increases in labor productivity, the shortening of working time without changing the weekly wage per worker must increase average total unit costs and marginal (labor) costs. Since the demand for the commodity might be assumed to be independent of the wage payments of the monopolists, the marginal revenue curve will remain constant while the marginal cost curve will rise with the increase in hourly rates of pay. To maximize net income the monopolist might, therefore, be expected to restrict output and (man hours of) employment.

This untoward result, however, is not logically necessary. The reasoning offered above would restrict the work week to 30 hours. It does not follow, however, that because the regulation restricts the hours of work per worker to any given amount, the plant need be similarly restricted.

In the hypothetical case being examined here, the elasticity of the demand for the output of the monopolist tends to grow larger on the lower reaches of the demand curve. Therefore, the monopolist might find it to his advantage to operate *two* shifts so that the plant is utilized in the neighborhood of 60 hours per week rather than 30. Under either the 30 or 60 hour week monopoly profit would be less than it was under the 40 hour week.

The situation might be summarized as follows. Before the wage-hour restriction was introduced monopoly profits were obtained when the plant operated 40 hours per week. However, when the work week is reduced and hourly rates raised, the monopolist is faced with the problem of redetermining his output. This redetermination involves the choice of operating one shift or two (or more) shifts. If the demand for the product is of progressively greater elasticity along its lower reaches, the net income to be derived from the sale of the bigger output will be greater than the net income to be obtained from the smaller output.

By assumption the marginal costs of producing a unit of output when the plant is operating 30 hours is identical with the marginal costs of 60 hour operation, since the rate of wages is the same in both cases, and since productivity differences are ruled out. Actually it is not improbable that the longer operation of the plant will reduce variable capital costs, and so reduce marginal costs.

Under the conditions outlined above the program of raising wages and cutting hours will increase a monopolist's output and employment and also reduce his price. These conditions, it should be noted, are probably less restricted than Zeuthen's case of inelastic demand for the output of the monopolist.

In Zeuthen's analysis the increase in output and employment were dependent upon a real increase in the demand for the monopoloid commodity. This contention need not be true. If, due to any reason, the demand for the monopoloid commodity increased, but if the new demand were *relatively inelastic* as compared to the original demand, the monopolist might find it to his advantage to operate his plant but 30 hours a week, thus restricting output and employment. This would obtain if the new demand curve were so highly inelastic that the marginal revenue curve was steep enough to cause the product of 30 hours of work to be sold for a greater profit than the output of 60 hours.

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Two Neglected Twentieth Century 100 Per Cent Reserve Economists

The banking theorists who have delved into the financial literature pertaining to past 100 per cent reserve economists have overlooked two American monetary reformers of the current century—namely, Willis E. Brooks and John Raymond Cummings.

W. E. Brooks set forth the 100 per cent reserve notion in 1908 in a privately printed pamphlet entitled *Slaves of the Banks and Their Emancipation*. I doubt whether there are more than a few copies of this study in existence. The New York Public Library is one of the few libraries that has a copy of this scarce economic tract.

Natural Money: The Peaceful Solution (New York, 1912) contains the 100 per cent reserve doctrine as elaborated independently by J. R. Cummings. It is interesting to observe that this book was published by the Bankers Publishing Company—paging Professor Frederick Soddy!

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REVIEWS AND NEW BOOKS

General Works, Theory and Its History

Economic Principles in Practice. By BRUCE WINTON KNIGHT. (New York: Farrar and Rinehart. 1939. Pp. xvii, 606. \$3.25.)

From the standpoint of arousing the interest of students in the study of elementary economics this is the best introductory textbook that this reviewer has seen. Not only is the style lucid and direct but the text as a whole marches on with a combination of logical development and suspense, more common to detective stories than textbooks. Telling illustrations which enliven practically every topic have been culled not only from a wide range of writers in economic theory and history but from others more popularly known, such as John Masefield, George Washington, Adolf Hitler, Huey Long and Walt Disney.

But the sustained interest of the book arises not so much from the lucid style and apt illustrations as from the way in which it is organized. The text is focused on economic problems with economic theory introduced as a tool for their analysis. Thus the theory, developed as a means to solve the problems, appears real and pertinent. This is surely a departure from the usual treatment which often divorces theory and practice or, if bringing them together, centers attention on the theory and brings in the problems to illustrate the theory.

Professor Knight recognizes that to give the student a "clear picture of our economic order" in a single volume, is a task involving "judicious inadequacy." On the whole one cannot complain seriously of his judgment. The beginning chapters are devoted to a brief description of the economic structure and include an especially good treatment of diminishing returns. The central portion of the book which follows is given over to the study of prices under competition, monopoly, monopolistic competition, and regulation. In the theoretical discussions here the necessary "inadequacy" is possibly not completely "judicious." The statements of the theories though well done are so brief that all but the keenest students may require considerable help to understand them. Arithmetical examples are largely avoided, tables are eliminated or appear only in footnotes or the appendix. In this respect the reviewer feels that too great concessions have been made to the student who listens to the radio as he reads. However, most of the theoretical statements are very carefully worded, and it may be that further elaboration and illustration are not absolutely necessary. In this connection it may be noted that in the table which appears in a footnote on page 173 the figures in each of the last three columns should appear in the reverse order from that in which they are given. No other serious misprints have been noted.

Following the section on prices are chapters on such topics as international economic competition, the general level of prices, and business cycles.

Next are three chapters on economic inequality. These, including as they do distribution theory, are among the most sparkling chapters in the book. But again the reviewer wishes a few more pages had been devoted to clarifying the theoretical material. In the final chapters which are given over to the "isms" the author manages to be lively and "sensible" at the same time—no mean accomplishment in this controversial field.

Perhaps the most refreshing aspect of this book is that here is a "sound" economist writing a text in which he explicitly recognizes the impossibility of completely divorcing economics and ethics. He has a social philosophy (as does any economist who is worth his salt) and he makes no attempt to hide the fact. Briefly his position seems to be that the economic machine should maximize production, minimize inequality and preserve the democratic (not necessarily the laissez faire) state. Baldly stated in this way the point of view may seem to be that of most elementary economics texts. Actually it is sharply different in that whereas the usual text emphasizes the maximizing of production and makes polite bows to minimizing inequalities, Professor Knight constantly emphasizes the problem of personal distribution. One passage may be quoted by way of illustration: "If it is wasteful for laborers to buy automobiles, or shopgirls to purchase finery, before providing themselves with adequate food and shelter, it is no less wasteful for society to put luxuries for a few ahead of necessities for many. Inequality causes wasteful consumption and correspondingly wasteful production" (p. 472).

The treatment of the marginal productivity theory of distribution gives a further illustration. It is merely one of the topics under the general head of the problem of inequality. Whereas the older economists often saw the marginal product as the deserved product, and recent writers have tended to handle it gingerly as just "the product," Professor Knight emphasizes the point that the tendency of the factors to get their marginal product is a serious cause of inequality of income. "The 'game' of economic competition," he writes, "is not a game which is conducted in the best traditions of sportsmanship" (p. 473).

The reviewer hails this text with real enthusiasm. The extent to which others will share this feeling will, the human race and economists being what they are, depend in considerable part on whether they too believe the theory "sound" and the philosophy "right."

GEORGE R. TAYLOR

Amherst College

Contemporary Monetary Theory: Studies of Some Recent Theories of Money, Prices and Production. By RAYMOND J. SAULNIER. (New York: Columbia Univ. Press. 1938. Pp. 420. \$4.00.)

Although Saulnier has probably selected the most eminent of contemporary monetary theorists—Hawtrey, Robertson, Hayek and Keynes—the

limitation of his monograph to these four writers justifies the subtitle rather more than the actual title.¹ As a synoptic view and critique of these writers, the book is generally satisfactory. At various junctures throughout and in the brief "concluding remarks" Saulnier does something toward drawing cross comparisons. But on the whole the book gives rather too negative an impression; although adverse criticisms are mostly well conceived, the author has not found much in each of his subjects which he can regard as genuine contribution, and he has not ventured far in synthesizing the *membra disjecta* into a positive theory of cycles.

In view of his agreement with Knight that "the period of production, viewed either in the disinvestment or in the construction sense, cannot be measured" (p. 274), one wonders why Saulnier taxes Robertson (p. 167) with neglecting the effect of monetary change on the "structure of production" of the Austrian theory, and how Saulnier can venture a suggestion *apropos* Hayek of circumstances under which "the structure may be extended over a longer period of time" (p. 292).

The author offends somewhat against the canons of criticism in his penchant toward general but ill-defined objection. "Robertson does not adequately define the nature of the capital-labor relationship . . . the institutional organization which he assumes is inadequately described" (p. 123); Hayek "does not adequately discuss factors influencing expectations as to the marginal productivity of capital" (p. 299). By such terms as these, the author places himself under embarrassing alternatives; either he must ask the reader to rely upon his omniscience, or he must proceed forthwith to the formulation of the "adequate" theory.

Concerning each of his *dei majores*, Saulnier writes for the most part reliably and discerningly. It is a little puzzling that he accepts Hawtrey's "unspent margin" as both identical with the *M* of equation of exchange and as constituting the *demand* for money (pp. 39-40). Hawtrey's belief that economic stability persists so long as total demand remains constant regardless of changes within the total, his exclusive reliance in the capital theory upon short-term interest rates and their effect upon inventories, his neglect of "real" factors in cyclical fluctuations, his exclusion of the capital "widening" process as relevant to interest rates (pp. 43, 47-48, 57, 59)—all these are rightfully objected to. But Saulnier might well have concluded with emphasis upon some of Hawtrey's net contributions to monetary theory—his analysis of unspent margins, his masterly description of the internal and external drains, his numerous and penetrating critical articles.

Many readers will sympathize with Saulnier's scepticism concerning Robertson's capacity to separate "appropriate" from "inappropriate" variations in output and also concerning the net social gain of financing the

¹ Is this penchant toward too inclusive titles a characteristic of the Columbia University Press? A recent volume by P. D. Paris, *Monetary Policies of the United States, 1932-38*, is concerned exclusively with the regulation of currency within the terminal dates!

former by expansions of bank credit (pp. 123-129, 205). The conclusion that "Robertson's most significant contributions are his development of theoretical tools of analysis" (p. 209) is indeed valid; but since this is the avowed purpose of most of Robertson's writings, the lack of statistical verification which Saulnier laments (p. 169 *et passim*) seems rather beside the point. Furthermore the schematic character of the analysis of Lacking is necessarily more or less divorced from continuous reference to institutional factors, which Saulnier quite rightfully requires of an eventual full-fledged theory of cycles (pp. 164-172, 206).

On the other hand, so drastic a departure from institutional settings as Hayek makes in his analogies from a barter economy can scarcely be countenanced (p. 223). So much of Hayek's reasoning depends furthermore upon entrepreneurs making "correct" anticipations—that is, conformable to the views which Hayek believes they *should* entertain—that the conclusions hold only upon very narrow, and unfortunately also highly improbable, postulates (pp. 233, 256). Saulnier expresses the universal objection to Hayek's fateful neglect of unemployed factors (p. 251) and his doctrinaire opposition to reflationary measures however advanced the stage of depression (p. 278).

In connection with Keynes, Saulnier makes rather limited use, at least explicitly, of the large volume of critical literature. Aspects of Keynes's analysis which he finds ill conceived are, amongst others, the measurement of output in labor-units of employment (p. 314), the dispensing with finite time units in analyzing savings and investment (p. 321), the categoric rejection of "forced saving" (p. 323), the divorcement of interest rate from marginal efficiency of capital (p. 353), and the neglect of price rigidities (p. 358). The author seems to believe that the fact that the Keynesian multiplier has to be found *ex post* constitutes a serious flaw (p. 335), although all economic prediction rests upon a retrospect over past developments. Saulnier concludes with a judgment, which will be widely accepted, that Keynes's most significant rôle has been the introduction of the monetary factor into general economic theory (p. 373).

Experience with this book in a seminar on monetary theory confirms an initial impression that it serves to introduce the writers and the nexus of problems in straightforward and illuminating fashion.

HOWARD S. ELLIS

University of California

Value and Capital: An Inquiry into Some Fundamental Principles of Economic Theory. By J. R. HICKS. (New York and London: Oxford Univ. Press. 1939. Pp. xi, 331. \$4.25.)

Certainly this is an important work. It is important, first because the author has set himself the ambitious task of constructing a dynamic theory of prices and production; second, because along the way he throws in

some interesting and often original ideas on controversial matters that are usually worth while in their own right; third, because many of his propositions are sure to stimulate discussion and analysis on the part of others.

His dynamic system of production and prices is developed upon a painstakingly constructed foundation, the laying of which occupies nearly the first two-thirds of the book. His starting point is the theory of subjective value. Thus equipped he moves on to develop a static theory of general equilibrium: the "general laws for the working of a price-system with many markets." By a static theory he means one which pays no attention to the element of time; consequently he believes that, up to this point in the argument, there is no occasion to bring in capital and interest, saving and investment. However the statement of his theory of these matters is the next step in the analysis. His foundation now completed, he proceeds to reshape his laws for the working of a price and production system with many markets so that account may be taken of the elements of time, interest rates short and long, price expectations and interest expectations, variations in demand and supply for commodities, securities and money. Handling all of these elements simultaneously, he sets forth the general outlines of a dynamic theory of (temporary) general equilibrium.

Professor Hicks's theory of subjective value will already be familiar to those acquainted with his article, "A Reconsideration of the Theory of Value" (*Economica*, I, 1934, 52-76), but the corresponding chapters in this book show considerable improvement over the earlier exposition, particularly with regard to the concepts of substitution and complementarity. These latter concepts, by the way, together with the distinction between the "income effect" and the "substitution effect" are utilized time and again as tools of analysis throughout the book.

His static theory of general equilibrium starts with the Walrasian system of exchange equilibrium, but soon moves on to consider in turn: the degree of stability of this system, the conditions of equilibrium for the firm and the degree of stability of this equilibrium, the general equilibrium of production and the degree of stability of this equilibrium. There is little that is new in all this except for the analysis, at each appropriate point in the argument, of the conditions of stability. In fact about the only justification for the painstaking care bestowed upon this part of the structure is its usefulness, as a matter of exposition, in paving the way for the even more intricate analysis of the dynamic theory.

As a further step toward the development of the latter, we next encounter his theory of interest and money. Here he accepts the view that the determination of the rate of interest may be analyzed in terms of either the supply and demand for loanable funds or the supply and demand for money. In the course of this part of the analysis, which is certainly one of the best parts of the book, he offers a simple and attractive explanation

of the system of interest rates: spot and forward short rates and the long rate. There is also the provocative suggestion that the existence of interest is to be explained not simply by the default risk and the uncertainty of the future course of interest rates but also in part by what he calls the imperfect "moneyness" of securities. There are also good discussions of the concept of equilibrium, of various concepts of income (a term the use of which Professor Hicks avoids as far as possible), and of saving and investment.

The development of his dynamic system brings into use all the tools that he has constructed in the earlier part of the work. The analysis becomes still more complex, and the conclusions correspondingly less clear-cut. The laws which have to be developed are those for the working of the price system, given the demand and supply for commodities, securities and money, interest rates, price and interest expectations. The starting point is the production plan of the firm, the conditions for its equilibrium and for the stability of this equilibrium. The next step is to consider the effects of changing price expectations and of changing interest rates upon the plan. Then the question is raised as to the stability of the (temporary) general equilibrium of the whole system, and an analysis is made of the elements of instability, on the one hand, and possible stabilizers on the other hand. There is a brief treatment of the parts played by hoarding, saving and investment; of the process of capital accumulation; and finally a rather disappointingly anti-climactic chapter on the trade cycle.

In this last part of the work certain features are worthy of particular note: the analysis of the conditions of equilibrium and particularly the classification of conditions stressed by earlier writers (*e.g.*, Wicksell and Keynes) as special cases of these general conditions, the use made of his concept of the elasticity of expectations, the revival of the concept of the average period of production as a measure of the effect of changing interest rates upon the production plan. But, a minor point to be sure, does Professor Hicks understand Böhm-Bawerk correctly (p. 218)? Surely the Austrians considered the matter of weights in defining their average period of production. In Böhm-Bawerk's case it appears clear that he used quantities of input, not quantities of output, as his weights.

A more serious stumbling block is Professor Hicks's demonstration that his dynamic system is imperfectly stable when the elasticity of price expectations is unity or greater. (See pp. 251-7, "The most important proposition in economic dynamics.") I have no doubt that the dynamic system is unstable in this case, but I find Professor Hicks's particular demonstration unconvincing. If I understand him correctly the reasoning runs like this: If the ratios between all current prices remain unchanged and if elasticities of expectations are unity, then a rise in the price of commodity X, due to an increase in demand for it, *must* be accompanied by a proportionate rise

in the prices of all other commodities; hence there will be a further rise in X , and so on. Surely the analysis is rendered sterile by the assumption that the ratios between all current prices remain unchanged.

Throughout the work, it should be noted, the assumption is that of perfect competition. Analysis in terms of imperfect competition is postponed to a later work. Probably the most serious defects traceable to the assumption of perfect competition in the present work would appear in the discussion of the stability of the system.

A further self-imposed limitation upon the work is abstraction from the part played by governmental or other institutional controls. Surely this is a very important limitation. Analysis of short interest rates, for example, without consideration of the part played by central bank policy certainly leaves much to be desired. More generally, the rigorous avoidance of discussion of the practical applicability of the principles developed, except for an occasional lapse, not only makes the work excessively tiresome for the reader but also causes him frequently to raise the question, How much of this is good for anything?

B. F. HALEY

Stanford University

Early British Economics from the XIIIth to the Middle of the XVIIIth Century. By M. BEER. (New York: Macmillan. London: Allen and Unwin. 1938. Pp. 250. \$3.25.)

The tangled forest of "Summae," "Sententiae," "Discourses," "Essays," "Considerations," "Observations," "Proposals," "Thoughts," or "Inquiries," through which the historian of early British economics must blaze a path presents no end of difficulties. Climates of opinion need to be recognized, although all writers were not equally affected; personal or group motives that inspired the composition of tracts must be understood, although not all economic writing reflected self-seeking; dominant political trends must be appreciated, although the correlation between economic criticism and policy is usually imperfect or ambiguous. Undaunted by these difficulties, Beer has attempted to span six centuries of British economic thought in the compass of a small book. The result is praiseworthy, and even though the small fellowship of specialists may not accept all of Beer's conclusions, knowing the pitfalls, they will be charitable.

For the forty-four pages devoted to the British Schoolmen (Alexander of Hales, Richard of Middleton, and John Duns Scotus), we should be especially grateful. Admittedly only slight deviations from the economic teachings of Continental contemporaries can be found; still the explicit analysis of work of the British Schoolmen properly and clearly reveals that heritage of universalistic economic doctrine which increasingly came in conflict with the economic policies of localism and subsequently of na-

tionalism. That practice and precept collided in the medieval era, Beer does not emphasize; and for this reason his general argument must be called inferior to that of Heckscher. Altogether Beer is too much interested in contrasts and too little in the course of gradual modification of a doctrinal fabric. Thus when he sees the age of mercantilism presently dominated by anti-medieval thought (rejection of nominalistic monetary theory, and repudiation of the idea of equality of exchanges particularly) he emphasizes this dichotomy almost to the exclusion of any discussion of the blending of medieval doctrines in the new fabric which a changing economic reality was inspiring. Granting that there was a growing revulsion against the central ethical kernel of the body of thought that traces from Aristotle, the Patristic writers, and the Schoolmen; and granting that the discussion of money, foreign exchange, and the balance of trade does reflect this antagonism, nevertheless much of the economic thought of the age of mercantilism was indisputably vestigial. Indeed the basic parts of the theory of production constitute, as I see it, a major area where continuity was remarkably evident.

For the most part, Beer's book contains just the minimal detail needed to support his major thesis which is that the period which he designates as the "adolescence of the middle class" also witnessed the rejection of the *idée fixe* of traditional doctrines, the invariable concern with commutative justice. Theorization of doctrinal history necessarily means its simplification because the complex richness of irrefrangible facts cannot be laid bare; although against this shortcoming, of course, stands an opposite virtue: clarity of contrast which results from purification of evidence. So Beer has sketched his history by means of pretty sharp contrasts: Child, Barbon, and Davenant, for example, are labelled anti-mercantilists, even as Malynes and Milles are unhesitatingly styled medieval; in contrast Mun and Misselden must have been intellectual gymnasts, because Beer holds that they shed their medieval beliefs and completely renovated their minds between 1621 and 1623, thereby becoming pure specimens of mercantilist (here synonymous with anti-medieval) writers.

But whereas fault may be found with Beer's methodology, the sagacity and, considering the space limitations, the completeness of the book deserve high praise. As an outline of British doctrinal development Beer's work will be frequently consulted, and all who read it will profit.

E. A. J. JOHNSON

New York University

Økonomisk Kalkulasjon i Socialistiske Samfund. By TRYGVE J. B. HOFF.
(Oslo: H. Aschehoug. 1938. Pp. vii, 373.)

The problem here investigated has not been treated comprehensively, or indeed scarcely at all, until in recent decades the trend toward collectivism

has made consideration necessary. A socialistic society is defined as one in which private property, at least in producers' goods, has been abandoned, and where the State is the sole employer of the productive factors, and the director of production. In such a society there are, by implications of the definition, no free markets and no prices, in the usual meanings of these terms. The function of the price system in a capitalistic society, particularly of determining what factors of production shall be used, how much of each, and to what ends, must be performed by some substitute arrangement, since the need does not fall away by a shift to collectivism. It is with the possibilities and character of such a substitute for the capitalistic price system that the author is concerned.

Economic calculation is for the determination of the proper use of scarce means to secure a maximum realization of given ends. That such calculations go on in a capitalistic society may escape the man in the street, although he himself performs such calculations, because of their diffusion in time and space, and among individuals. That the calculations become infinitely more difficult in a socialistic society, the central board of production control would have to discover if it is to escape chaos, since it must make or control the calculations and the decisions resting thereon. If the goal, for example, is the maximization of the satisfaction of wants to the members of the economy, the board would, in the absence of prices generated in a free market, lack all knowledge of marginal values to individual members. For such values can be expressed only in terms of competitive prices, not in prices arbitrarily set by a central board, be it endowed with ever so much authority. It is not a gigantic problem of simultaneous equations of consumer preferences. It is the impossibility of obtaining the basic data themselves.

The author's task is rendered more difficult by the fact that socialistic societies may occur in significantly different forms. Thus if one assumes a natural economy, in which the use of money in any form is barred, any possibility of a price system, and thereby of economic calculation, disappears. If in turn one admits various characteristics, each of which may be said to be a move away from socialism, such as the use of some form of money, the free choice of goods and work, and even some measure of decentralization and competition of production, one increases by each addition the possibility of effective economic calculation, and also increases *pro tanto* the theoretical and practical right of the society to exist.

To reach this conclusion the author uses fifteen chapters of textual matter and three appendices. Appendix A is a brief and rather popular description of the price mechanism in a capitalistic society. Appendix B is a discussion of the defects in a capitalistic society and the possibilities for their elimination by a change to socialism. More important is Appendix C, which is a comparison of the experiences of Soviet Russia with the largely deduc-

tive conclusions reached in the text. This comparison shows a close agreement. Both the experience and the reasoning support the prediction that a society will succeed practically in proportion as it moves away from the purest form of socialism, a natural economy.

The treatment assumes to some degree the form of a debate in which conflicting authorities are cited at length. For this reason nearly half of the book consists of quotations in the original English, German, French, and Swedish. For some reason the rather infrequent quotations in French are accompanied by parallel Norwegian translations. Possibly it is the author's confessed unfamiliarity with the Russian language which has prevented the similar use of parallel Russian and Norwegian quotations, where there would have been more need for such use. Unfamiliarity with the Russian language, however, is a drawback, if at all, only in the third appendix. But the extensive use of foreign languages seems to have been a factor in the failure to correct a rather excessive number of typographical errors.

JENS P. JENSEN

University of Kansas

NEW BOOKS

AMOROSO, BAUDIN, BORDIN, DE PIETRI TONELLI, DE LA HARPE, LANZILLO, ROY, VON MISES. *Cournot nella economia e nella filosofia*. (Padua: Cedam. 1939. Pp. 243.)

BOWERS, E. L. and ROWNTREE, R. H. *Economics for engineers*. 2nd ed. (New York: McGraw-Hill. 1938. Pp. xi, 591. \$4.)

This is a fairly complete revision of the edition of 1931. Among the significant changes are a new introductory chapter dealing with economics and technological progress, a greater emphasis upon methodology, a discussion of the legal background of capitalism, and new or extended treatment of money and banking, labor relations, social security, and collectivism. The book contains much factual information and illustrative material; and, as might be expected, extensive use is made of diagrams and mathematical formulas. Each chapter is followed by a list of questions and reference readings.

The instructor's reaction to this book will depend largely upon his own views on methods of presentation. If he holds to the traditional approach to the subject, the work will appear to be weak in theoretical content. On the other hand, those who favor adapting the material to the particular student group or interest will find here a book that will appeal to students familiar with engineering methods and techniques.

J. E. MOFFAT

FAIRCHILD, F. R., FURNISS, E. S. and BUCK, N. S. *Elementary economics*. Vols. I and II. 4th ed. (New York: Macmillan. 1939. Pp. xxvii, 701; xix, 692. \$2.50, each vol.)

GEMMILL, P. F. *Fundamentals of economics: a textbook for introductory college courses in economic principles*. 3rd ed. (New York: Harper. 1939. Pp. xvii, 633. \$3.)

The current edition, which is the third, is offered as a completely reset

text with separate chapters on distribution and imperfect competition. In the present edition the book represents a carefully written and edited job, improved in the light of experience in its teaching possibilities. It should continue to be one of the more popular textbooks for beginning courses in economics, particularly where such courses are relatively short.

WILLARD E. ATKINS

HEWITT, W. W., GUTHRIE, G. L. and COFFEY, F. A. *Questions and exercises on applied economics*. 2nd ed. (New York: Crofts. 1939. Pp. viii, 164. \$1.)

First edition was published in 1934. Primarily adapted for use with Bye and Hewitt, *Applied Economics*, third edition, 1938.

KALECKI, M. *Essays in the theory of economic fluctuations*. (New York: Farrar and Rinehart. 1939. Pp. 154. \$1.75.)

KNIGHT, A. W. *What's wrong with the economic system?* (London and New York: Longmans Green. 1939. Pp. xiii, 179. \$2.40.)

KORSCH, K. *Karl Marx*. (New York: Wiley. 1938. Pp. 247. \$1.75.)

This compact little volume is not a life of Marx, but an interpretation of his doctrine. It is divided into three parts, under the headings "Society," "Political economy," and "History," and the point of view is frankly Marxian. The material is well organized and well presented, and every page bears evidence of the author's detailed knowledge of Marxian literature. In the reviewer's opinion the best parts of the book are those dealing with the principle of historical specification, the materialistic conception of history, the theory of capital and value, and the relation of the Marxian doctrine to the Hegelian philosophy. The book emphasizes the practical aspects of Marxism, and the persistent desire of Marx himself that his work should directly influence the course of history. In this connection the author quite fittingly quotes from Marx's criticism of Feuerbach's philosophy; "Philosophers have only interpreted the world differently; the important thing, however, is to *change it*" (p. 235).

It should be noted that this book is not merely an introduction to the subject. It is rather a rigorous analysis of some of the most controversial features of Marxian theory. As such it will prove a useful addition to the numerous evaluations of Marx. In spite of its place in the modern sociologists' series, it should be of special interest to the economists. To quote directly from the author, "Just as Marx's new science is in its form above all a strictly empirical investigation and critique of society, so in its content it is, above all, economic research" (p. 234). Thus it appears that in a very real sense, "Marx's materialistic social science is not sociology, but economics" (p. 234).

J. E. MOFFAT

LANGUM, J. K. *Problems and questions on the principles of economics*. (Boston: Ginn. 1939. Pp. viii, 212. \$1.25.)

LONGFIELD, M. *Three lectures on commerce and one on absenteeism*. 1835. Reprints of scarce works on pol. econ. no. 4. (London: London School of Econ. and Pol. Science. 1938. Pp. 111. 6s.)

Samuel Mountifort Longfield (1802-84) delivered these lectures when he was professor of political economy at Trinity College, University of Dublin. Later he became a professor of law at the same university, and for a time served as a judge of the Irish landed estates court.

These lectures show some of the pioneer contributions he made to the classical theory of international trade: the operation of comparative costs and reciprocal demand in determining the course of trade (pp. 52-56), and the effects of tariffs and absenteeism on the terms of trade.

He describes the benefits of commerce, the fallacies of the later forms of mercantilism, and the futility of expecting exports without imports, or exchanging exports for gold over a long period of time. Protected industries are apt to be less efficient, and are protected at the expense and neglect of consumers (p. 40).

Longfield's ideas are not new to most economists, but are clearly and skillfully stated and need repeating in a world of trade restrictions and tariffs.

GEORGE W. SANFORD

McCONNELL, D. W., and others. *Economic behavior: an institutional approach*. Rev. ed. (Boston: Houghton Mifflin. 1939. Pp. xiv, 923. \$3.75.)

The first edition of this text, in two volumes, appeared in 1931; and this revision, in one volume, is so different from the original as to be practically a new book. Even the list of authors, members of the department of economics at New York University, is changed. Some of the authors of the first edition are listed as contributing to the revision, but two of the original authors are not listed, and several new members of the department are named as contributors. The chapters have been completely re-shuffled, some have been eliminated, and new ones added, to make a book quite different from the first edition, and definitely better. The authors are a little less definite in their repudiation of traditional economic theory than they were in the first edition—where they were convinced that "the older assumptions and categories must be abandoned almost *in toto*"; and the new book shapes up more like a conventional text in economics. In it is to be found much excellent material, some of it rather sociological in character, some of it more nearly in line with recent developments in social thought than much of the material commonly found in economics texts. Probably most teachers of economics will want more price analysis than is to be found here; but for those who prefer the institutional approach, the book will no doubt be very useful.

JOHN ISE

McCULLOCH, J. R. *The literature of political economy: a classified catalogue*. 1845. Reprints of scarce works on pol. econ., no. 5. (London: London School of Econ. and Pol. Science. 1938. Pp. xiii, 407. 12s. 6d.)

Hard upon Wheeler's issue of Massie's *Index* comes this photostat reprint of McCulloch's *Literature*. Students of economic bibliography will be grateful for the service. The *Literature*, if not yet in the class described by McCulloch himself as "scarce and valuable" is still not to be had for the asking. The issue is rigorously a "reprint" and the reader is likely to lament that no editor has supplied an informative introduction after the manner of Dr. Shaw's prelude to the "Massie." We know too little of McCulloch's colorful career; even his portrait is obtainable only with some scratching. Whence came his interest in economic texts and what were the stages in the increase of his collection? Bernard Quaritch told me unforgettable details many years ago; and it is of record that the Library was acquired by Lord Overstone, was bequeathed to Lady Wantage and was presented to University College, Reading,

where perhaps it now rests. Some day a sentimental mole will dig up the particulars and gossip to us as delightfully as Bonar and Scott have done of Adam Smith's books, as Higgs of Cantillon's, as Fetter *secundus*, prospectively, of "Prize" Pryme's, as Keynes of Foxwell's, and as Seligman and Donham are still to do. When this *chronique* sees light, I should like to think of it as including at least two scraps: the first, an inscription on the fly-leaf of one of my "association" copies of the *Catalogue* (1862)—a sequel to the *Literature*—"N.B. It is particularly requested that this book be not lent, nor permission given to make extracts from it"; the second, the distinction enjoyed by the *Literature* of being, in the copy of Frederich Hendriks—an outstanding figure in London insurance circles of the last generation—probably the only book in economic literature to have been "expanded" and "extra-illustrated."

JACOB H. HOLLANDER

NOGARO, B. *La méthode de l'économie politique. L'économie politique contemporaine*. Vol. i. (Paris: Lib. Gén. de Droit et de Jurisprudence. 1939. Pp. vi, 275.)

This is the first of 23 volumes dealing with contemporary economics. In addition to being general editor, Professor Nogaro will be author of several of the series. A survey of such encyclopaedic breadth can hardly claim to be completely original; its virtue will lie in integrating the material in the fields concerned.

The present volume illustrates these points exceedingly well. One who is acquainted with Keynes, Robbins, Morgenstern, and Wootton will encounter much that is familiar; yet the book goes beyond these treatises in its analysis and more particularly in indicating when various methods might be profitably employed in economic reasoning. Except for over-elaboration in its examples this first volume may well serve as a model for those to come.

W. B. LOCKLING

O'HARA, F., O'LEARY, J. M. and HEWES, E. B. *Economics: principles and problems. A textbook for Catholic colleges*. (New York: Van Nostrand. 1939. Pp. x, 672. \$3.50.)

PIROU, G., and others. *Les nouveaux courants de la théorie économique aux Etats-Unis*. Tome I. *Les précurseurs*. 2nd ed. (Paris: Domat-Montchrestien. 1939. Pp. 347. 85 fr.)

As a setting for the present volume the author felt the need of sketching in a few bold strokes the central ideas of the two great neo-classic schools; marginal economy and the economy of equilibrium. The new currents of economic science, while particularly alive in the United States, are to some degree present in the majority of the European countries. As a whole themselves abstract, they constitute an opposition to the abstract theories of neo-classic economy. The assumptions of marginal economy have been revived mainly by the Austrian school, notably by the disciples of Mayer and Von Mises, and by the London School of Economics. Advances of econometrics have been pushed particularly in the United States and the northern European countries, thus aligning themselves with the work of Walras and Pareto, and achieving formulations of theoretical laws about markets and prices by the aid of very refined mathematical procedures. Pirou in delineating the essential ideas of marginal economy and of the economy of equilib-

rium stresses their method, their differential theories and their divergent social conclusions about liberalism *versus* interventionism.

The author regards Veblen, J. M. Clark and H. L. Moore as the three notable precursors of the most recent currents in American economic thought. He considers Veblen to be the main source of the newer ideas. While Veblen was more of a philosopher, the other two were genuine economists whose points are, however, far from identical. It was especially Veblen who created the "revolutionary" climate in which the new currents could arise and get some public hearing.

Pirou follows a not too general scheme in sketching descriptively the contributions of his chosen precursors. A biographical and bibliographical statement forms the beginning of the separate studies. Next an analysis of their critical theoretical positions and their relation to the dominant currents of American thought in general is magistrally handled. Finally, their theories of the origin and control of economic cycles, the "fathering" or the inspiration given to certain aspects of New Dealism are clearly presented.

HERMAN HAUSHEER

RICCI, U. *Tre economisti italiani: Pantaleoni—Pareto—Loria*. (Bari: Laterza. 1939. Pp. 235. L. 18.)

It is most unfortunate that the author refrained from writing a thoughtful analytical study of the main ideas of the above noted Italian economic and social thinkers; he primarily presents a purely external and mechanical treatment of their views. The volume, in other words, contributes nothing to an insight into the reality of the major ideas of the three thinkers under consideration.

It is particularly in regard to Pareto's contribution to social thought that one would like to have a more objective analysis. Disappointment awaits the reader if he looks for a sober analysis that will help deflate the uncritical enthusiasm that Pareto's heavily padded, confused, and obscure *Trattato di Sociologia Generale* has unfortunately acquired among dilettantes. The author, while rightly seeing the intrinsic value of Pareto's sociology, fails to give the reader a balanced view.

The reviewer has the feeling that Pareto's contribution to the mathematical analysis of economic processes is of more lasting influence than what he offers in his singularly disjointed sociology. Pareto largely popularized the reality back of the notion of the *élite* which the French utopian socialists and many others have anticipated. Moreover, he made altogether too exaggerated claims for his view that social conduct can be accounted for by reference to motivation alone. He did not realize that the operation of cultural factors in social life accounts probably for equally as much. To the reviewer the most unsatisfactory part of Pareto's sociology is his theory of the residues and derivations.

Neither has we offered any insight-giving analysis of the other two economists. Loria's contribution to socio-economic thought assuredly deserved much more space, notwithstanding its being a striking example of the single factor fallacy of sociological generalization.

HERMAN HAUSHEER

ROBBINS, L. *The economic basis of class conflict and other essays in political economy*. (London and New York: Macmillan. 1939. Pp. xiv, 277. \$2.25.)

ROBBINS, L., and others. *Cinq conférences sur la méthode dans les recherches économiques*. (Paris: Recueil Sirey. 1938. Pp. 106.)

SENIOR, N. W. *An outline of the science of political economy*. (New York: Farrar and Rinehart. 1939. Pp. xii, 249. \$2.50.)

A reprint of Senior's *Outline* (first edition, 1836, sixth edition, 1872), published under the auspices of the editorial board of the Library of Economics, consisting of Dr. P. N. Rosenstein-Rodan, general editor, Professors Lionel Robbins and N. L. Hall, England, Professors J. Schumpeter and Jacob Viner, United States, Professor G. Pirou, France, Professor L. Einaudi, Italy, and Professor Erik Lindahl, Sweden.

SMITH, A. H. *Economics: an introduction to fundamental problems*. Rev. ed. (New York: McGraw-Hill. 1939. Pp. 575. \$1.68.)

TAUSSIG, F. W. *Principles of economics*. Vol. I. 4th ed. (New York: Macmillan. 1939. Pp. xxii, 547. \$3.)

Economic History and Geography

The British Common People, 1746-1938. By G. D. H. COLE and RAYMOND POSTGATE. (New York: Knopf. 1939. Pp. viii, 588, xxxiii. \$4.00.)

This is an interesting, well written and important book. Yet many who may be attracted to it by its title will be disappointed. In the preface its authors limit their history to economic and political topics; but they do not warn the reader that in their view the history of the British common people is concerned solely with "working-class progress." Neither do they indicate that rising real wages and the increasing participation in political and trade-union activities by which economic betterment is attained are the only elements in that progress to which they propose to attend. Indeed the book is misnamed; it is a history of British trade unionism and political agitation by workers against the background of their varying economic fortunes.

These limitations in a history of the "common people" arise from the socialist, if not Marxist, outlook of the authors. But these very limitations give a marked unity to the two centuries of British history which they survey as the story of the workers during the rise, climax and crisis of British capitalism. The book opens with a detailed description of the structure of British industry, the economic position of the workers therein and the size and distribution of the population as industrial capitalism began; it ends with an arresting discussion of the present position. The chapters between, however, deal for the most part with working-class agitation rather than with the changing structure of British industry or the growth and migration of the British population. There is but small intrusion of the private opinions of the authors; for the most part the skillfully presented record is allowed to speak for itself. Yet the topics selected and the manner of their treatment leave no doubt of their belief in the class-struggle philos-

ophy as more "realistic" than the liberal point of view consistently maintained by British labor organizations since the collapse of chartism. Enough attention is given to the course of economic development to provide an explanation of most of the fluctuations in the tide of agitation. But the excellence of these ventures into general economic history makes one wish they had left more of the detail of trade-union history to the specialized treatises.

Had they done so they might have thrown much needed light on phases of the history of the common man usually omitted even by economic historians. As it is, the history of the common people remains to be written. When this necessary task is done, it is to be hoped that the writers will not be forced by their historical philosophy to exclude the vast middle class or to pay excessive attention to the influence of political and trade-union activities, which affect the mass of men no more than any other aspects of economic development to which Cole and Postgate have paid no attention.

F. A. KNOX

Queen's University

Schacht: Hitler's Magician. The Life and Loans of Dr. Hjalmar Schacht.

By NORBERT MUHLEN. (New York: Alliance Book Corp., Longmans Green. 1939. Pp. xiv, 228. \$3.00.)

As a biography Herr Norbert Muhlen's study has little claim to serious attention. The life of Hjalmar Horace Greeley Schacht—his father had lived in Brooklyn and admired Horace Greeley—from his birth in 1877 to 1923 when he was appointed president of the Reichsbank is given fourteen pages, and the biographer's treatment throughout is hostile, scrappy and unconvincing. But as an exposition of deeds and facts, particularly the flow of marks, pounds and dollars, it is good medicine for a part of the world which is accustomed to gulp down docilely the myths of the "tragedy of reparations" and "export or die."

A truthful account of the activities of Dr. Schacht as "debt dictator of the Third Reich" (the title of the central and major section of the book) shows that Germany has made an extremely good thing out of reparations and foreign loans. As Herr Muhlen puts it (p. 215), the "Third Reich, after liberating itself from the chains of Versailles, instead of making an end of them, laid them on other nations." Germany sacrificed in reparations and deliveries from 1924 to 1931 only 10 billion marks, but the money wheedled and bullied by Dr. Schacht from the rest of the world in the first four years of the National Socialist régime was 18 billion marks, or nearly twice as much. This the foreign creditors and their governments appear to have given almost gladly, so that Germany might have guns instead of butter.

Almost incidentally to the main argument, which is concerned with the self-seeking of Dr. Schacht, the facts to quash other myths are spread out. Poor Germany under the crushing burden of reparations! Her industrial production increased 42 per cent between 1921 and 1929, but production in Shylock Britain and France increased only 16 and 27 per cent respectively in the same period. The National Socialists are supposed to have seized power because Germany was collapsing under the old system. But on January 15, 1933, a fortnight before the seizure, unemployment had stopped rising for the first time since 1928, in the last three months of 1932 industrial production had increased, and security prices had been rising since the preceding November. Germany is supposed to have been bled white in the reparations period itself. Actually she received 28 billion marks in foreign loans in the reparation period and paid out only 10 billion.

Dr. Schacht's methods of extracting huge sums for Germany from a gullible and willing world in the National Socialist period are described in full. They include laws forbidding the individual German debtor to pay interest on principal on foreign loans; penalty, the guillotine (Law of December 1, 1936); reduction of rates of interest on short-term debt (Standstill agreement of February 17, 1933); reduction of interest on long-term debts and refusal to pay amortization (Act of June 9, 1933); discrimination between creditors (beginning early in 1934); ten-year moratorium (September, 1934); repurchasing German bonds held abroad at sacrifice prices over the American Government's protest of January 3, 1934; establishing blocked marks; and "dumping at the cost of the be-dumped."

Who lost? The small saver everywhere, particularly the small saver in the United States. And who got the money? German munition makers. Herr Muhlen reminds the reader, who probably needs reminding, that the first American loan to Germany after the Dawes loan was for Krupps, the next for the Stahlverein, the next for Krupps, and the next for Krupps . . . and so on.

It is well for people who have holes in the bottoms of their pockets that at the time of reviewing Dr. Schacht is said to be somewhere in Asia.

ALZADA COMSTOCK

Mount Holyoke College

L'Intervention de l'Etat en Matière Economique. By HENRY LAUFENBURGER. *L'écon. pol. contemp.*, Vol. IV. (Paris: Lib. Gén. de Droit et de Jurisprudence. 1939. Pp. 371. 70 fr.)

This study is the fourth of a new economic series of twenty-three monographs published under the direction of Professor B. Nogaro of the Uni-

versity of Paris. Its author, professor at the University of Strasbourg, is a thorough student of present-day economic developments in France and in Germany.

"Interventionism"—also referred to as neo-capitalism, neo-mercantilism, or, more familiarly, planned economy—according to the author, is a distinct, quasi-permanent form of socio-economic organization, and not merely a transitional stage between capitalism and socialism (or communism). These latter "isms," he claims, referring to ownership of the means of production, have indeed become quite inadequate to sum up actual developments. The true issue, he finds, is not between capitalism and socialism, but between liberalism and "state-ism" (*étatisme*). For the question of ownership of the means of production is shown to be of minor importance compared to the question regarding the measure and kind of centralized state control of the economic and social life of the nations.

The present study is not intended as a "theory of interventionism," but aims to supply the elements for such a theory "by showing why certain methods of interventionism have succeeded, and why others have failed." With this purpose in view it discusses, topically arranged, a great variety of forms and methods of state intervention, traditional "conservative," and recent "revolutionary" ones. Prime consideration is given to French and German policies, next also to the New Deal of the United States, to certain phases of Italian corporatism, and to many other forms of state control the world over; the soviet economic regime, however, is left for a separate monograph of the series. The chief topics discussed are: the rôle of the state in public service industries, notably transportation and communication; monetary policies; principles of taxation; measures to control economic fluctuations such as valorization through restriction and storage of output, tariff policies, and public works; war economy and its modern outgrowth; autarchy; state control over private economic organizations such as trusts, trade associations and trade unions, and various others.

The author's view is that "state-ism" is on the march, notwithstanding a widespread "nostalgia for liberalism." To be effective, however, it must be thorough and all along the line of production, consumption, foreign trade, and distribution as in Germany, and not piecemeal as in France and the United States. The German policy of autarchy on the other hand, which he discusses in considerable detail, he finds not only harmful to all concerned, but also unsuccessful in achieving its goal.

The book is agreeably free from nationalistic animosities. Its "state-ist" bias seems due to the author's preoccupation with the social-engineering rather than the humanistic aspects of the whole problem. The treatment of the wide range of topics is at times rather sketchy and not always quite accurate (as when the long-dead N.R.A. codes are referred to as though still in force). On the other hand the broadness of the approach creates a

perspective of socio-economic evolution for issues which, viewed in isolation, are apt to be mistaken for mere political party maneuvers. The absence of an index and a bibliography considerably lessens the usefulness of the book for reference purposes.

JOHN V. SPIELMANS

Washington, D.C.

NEW BOOKS

- ASAHI, I. *The economic strength of Japan*. (New York: Stechert. 1939. Pp. 324. \$3.)
- ATHERTON, L. E. *The pioneer merchant in mid-America*. Univ. of Missouri stud., vol. xiv, no. 2. (Columbia: Univ. of Missouri. 1939. Pp. 135. \$1.25.)
- BAILEY, K. P. *The Ohio Company of Virginia and the westward movement, 1748-1792: a chapter in the history of the colonial frontier*. (Glendale, Calif.: Arthur H. Clark Co. 1939. Pp. 360. \$6.)
- BARNES, H. E. and BECKER, H. *Social thought from lore to science*. Vol. I. *A history and interpretation of man's ideas about life with his fellows*. Vol. II. *Sociological trends throughout the world*. (Boston: Heath. 1938. \$5; \$4.50.)
- BETTELHEIM, C. *La planification soviétique*. (Paris: Rivière. 1939. Pp. ii, 335. 45 fr.)
- BOISSONNET, J. *La misère par la surabondance: Karl Marx, père de la crise mondiale*. (Paris: Recueil Sirey. 1938. Pp. 221. 35 fr.)

The book is more of a political pamphlet than a scientific treatise. Starting from the experience of the Popular Front government in France, the author defends the thesis that the present economic crisis is due to a large extent to the class-war attitude of the workers. According to M. Boissonnet's opinion, the workers have exacted a wage level which actually destroys the capital and diminishes the national output. He finds a solution for this dangerous situation in a reorganization of the national economic system along corporative lines, similar to the Italian experiment.

The author fails to document his contention and he endangers his case seriously by generalizations; his attempt, e.g., to explain the difficulties of Central European governments in the years 1919-1924 and the period of inflation by the socialist complexion of these governments, can hardly be considered as serious. The book may have a function in the present struggle in France, but its importance does not extend further.

ERICH VOEGELIN

- BRUCK, W. F. *Social and economic history of Germany from William II to Hitler, 1888-1938: a comparative study*. (Cardiff: Univ. of Wales Press. 1938. Pp. xv, 292. 12s. 6d.)
- BUELL, R. L. *Poland: key to Europe*. (New York: Knopf. 1939. Pp. xi, 364, xv. \$3.)

The dismemberment of Czechoslovakia has opened Poland's eyes as to the dangers to her own national integrity from the West. But she distrusts Soviet Russia probably not less than Czarist Russia though for different reasons. Sovietization of Poland is just as unwelcome to leading Polish circles as the Czarist policy of Russification.

The political system of Poland is a peculiar blend of democratic and authoritarian principles. The semi-dictatorial régime seems to be relatively safe because "Poland realizes that a civil war would inevitably mean the intervention of Russia and Germany and the consequent loss of independence. No Pole wants Poland to become a second Spain, because the consequences to Polish independence would be even more serious—namely, a new partition." The American student of European affairs owes sincere gratitude to Mr. Buell for his detailed though somewhat "crowded" description of the economic problems and trends in the young Polish state.

Following the universal trend toward economic regimentation, Poland has been increasing continuously the state control of private business while preserving the formal principle of individual enterprise and competition. "An opposition against state intervention in economic life . . . , which in western countries comes from a large middle class, has hardly manifested itself in Poland." State ownership extends to railroads, post, and telegraph, as well as many mines, factories, and banks. It is significant for the progress of *etatism* that "one-third of government revenues comes from its enterprises and monopolies." According to Mr. Buell, ". . . private enterprise in Poland is on the defensive and virtually stagnant." The state management of monopolies and enterprises seems to suffer from red tape and political favoritism and has caused many serious complaints. Though rich in natural resources, Poland depends on the import of various raw materials, due to her vigorous trend toward industrialization, and suffers considerably from the cobweb of world trade barriers. In Mr. Buell's words, "the Polish population is increasing more rapidly than production, which means a constantly lowered standard of living."

A touch of journalistic fervor seems to have driven the author to a rather bold assertion that "Poland holds the key to Europe." Doubts may also arise as to the validity of Mr. Buell's conviction that "perhaps the greatest error of Poland's foreign policy since the World War has been to desert the principle of Slavic unity." Purely national ambitions in Poland tend to make appeals to a broader Slavic unity vague, not to say illusory. The pragmatic character of Poland's foreign policy seems hardly compatible with such sentimental slogans. They have not been successful in the past and have even less prospect in the future.

BORIS M. SCHOENFELDT

BUTLER, H. B. *The economic factor in international affairs*. (Manchester: Manchester Univ. Press. 1939. Pp. 36. 1s.)

COLE, C. W. *Colbert and a century of French mercantilism*. Vols. I and II. (New York: Columbia Univ. Press. 1939. Pp. xii, 532; 675. \$10, the set.)

EINZIG, P. *Economic problems of the next war*. (New York: Macmillan. 1939. Pp. x, 146. \$2.50.)

With all respect and regret from an admirer of the maestro of the literature of world finance, it must be admitted that this is a slight little book. It is a series of sermons and guesses rather than a treatment of the more delicate problems of war economy and finance. However, if anyone is to go about guessing it may as well be Dr. Einzig, who has so many valuable facts at his fingertips that the reading cannot be entirely unprofitable.

The suspense need not be prolonged. If Germany should embark upon a world war she and her allies would be completely defeated (see chapter

15, "Conclusion: Why Britain will win"). Twenty-nine reasons are given. The first four give an idea of how the argument runs:

1. Because the next war is . . . bound to be a prolonged struggle.
2. Because in a prolonged struggle the economic factor assumes a growing importance.
3. Because from an economic point of view Great Britain and her allies would be in a better position than Germany and her allies to stand the strain of a long war.
4. Because in a prolonged war the initial advantage possessed by a totalitarian state in the form of a disciplinarian economic system would be bound to disappear after a while through the application of economic discipline and organization in the democratic countries.

Much of the earlier part of the book is devoted to admonishing Great Britain to prepare and perhaps actually to begin this economic discipline and organization. Organize production for national defense very early. Apply conscription (the preface is dated November, 1938) and make it more palatable by the simultaneous adoption of industrial conscription. Control food consumption and imports as early as possible. Avoid excessive inflation. And so on for many pages and many policies.

May the occasion never arise! If it does, may Dr. Einzig be more specific!

ALZADA COMSTOCK

EINZIG, P. *World finance, 1938-1939*. (New York: Macmillan. 1939. Pp. xiv, 307. \$3.)

"Consequences of Austrian annexation and dismemberment of Czechoslovakia, struggle of the franc, trade revival, flight of capital, gold disharding and rehoarding, war and rearmament finance."

FORD, G. S., editor. *Dictatorship in the modern world*. Rev. and enl. ed. (Minneapolis: Univ. of Minnesota Press. 1939. Pp. xiv, 362. \$3.50.)

GIDEONSE, H., BOYNTON, P. H., and PALYI, M. *Hitler's economic motives: a University of Chicago Round Table broadcast*. (Chicago: Univ. of Chicago. 1939. Pp. 16. 10c.)

GRAS, N. S. B. *Business and capitalism: an introduction to business history*. (New York: Crofts. 1939. Pp. xxii, 408. \$3.50.)

GREEN, C. M. *Holyoke, Massachusetts: a case history of the Industrial Revolution in America*. (New Haven: Yale Univ. Press. 1939. Pp. ix, 425. \$4.)

GUILLEBAUD, C. W. *The economic recovery of Germany from 1933 to the incorporation of Austria in March, 1938*. (London and New York: Macmillan. 1939. Pp. xiv, 303. \$3.25.)

HANKE, L., editor. *Handbook of Latin American studies: a selective guide to the material published in 1937 on anthropology, art, economics, education, folklore, geography, government, history, international relations, law, language, and literature*. (Cambridge: Harvard Univ. Press. 1938. Pp. xv, 635. \$4.)

Though following closely on last year's volume, this issue marks an advance over its predecessors in both size and scope. It contains new sections on Brazilian art and on language; and the bibliographical sections, which form the larger portion of the book and are its chief reason for being, have been expanded. Furthermore, special articles are more numerous and interesting than ever. One of the latter by Professor D. M. Phelps upon "Sources of current economic information on Latin America," with lists of what librarians call "continuations," should prove very useful.

VICTOR S. CLARK

HANTOS, E. *Le régionalisme économique en Europe*. (Paris: Inst. Internat. de Coöp. Intellectuelle. 1939. Pp. 59.)

HASKELL, H. J. *The New Deal in old Rome: how government in the ancient world tried to deal with modern problems*. (New York: Knopf. 1939. Pp. xii, 258, xi. \$2.50.)

This book is the fruit of an attempt by the editor of the *Kansas City Star* to think out for himself the causes of the collapse of the Roman Empire. In the process he has observed that the Roman state was faced from time to time with economic problems which resemble those which confront the United States today and also that Rome tried with varying degrees of success to deal with them by means of agencies and policies which parallel many of those put into operation under the New Deal. These ancient anticipations of modern practice Mr. Haskell has woven into an interesting narrative with enough historical background to make their true character intelligible to the reader who has no training in Roman history. Using a thoroughly up-to-date terminology, he describes in lively fashion the Roman Farm Credit Administration, Farm Debt Conciliation, Home Owner's Loan Corporation, Public Works Administration, Resettlement Administration, Small Holding acts, and Agricultural Adjustment Administration in their origin, scope and efficacy. His reliance upon good authorities and his familiarity with public affairs have prevented the author from pressing the ancient and modern parallels too closely while emphasizing the fact that the Roman experience may have some lessons or, at least, warnings for the states of today.

Little in the book calls for specific criticism. It should have been pointed out that there are considerable difficulties in placing the Licinian land laws in 367 B.C.; Pompey certainly was not "middle-class"; and perhaps the lack of a New Deal philosophy in Rome might have been brought out more strongly. There are four maps illustrating the expansion of the Roman Empire, a chronological table, bibliographical appendices, and an index. The professional historian will not learn anything from this study, but he may be stimulated by the original point of view; others may well read it with pleasure and profit.

A. E. R. BOAK

HAYES, C. J. H. *A political and cultural history of modern Europe*. Vol. II, shorter rev. *A century of predominantly industrial society since 1830*. (New York: Macmillan. 1939. Pp. xii, 865. \$4.)

HERLITZ, N. *Sweden: a modern democracy on ancient foundations*. (Minneapolis: Univ. of Minnesota. 1939. Pp. 140. \$2.)

HIMADEH, S. B., editor. *Economic organization of Palestine*. (Beirut, Lebanon: Am. Univ. of Beirut. 1938. Pp. xxi, 602. 12s. 9d.)

HOWE, G. F. *A general history of the United States since 1865*. (New York: Prentice-Hall. 1939. Pp. xxvii, 654. \$3.50.)

Contains chapters on tariff politics, monetary problems, progressive movement, growth of huge business, plight of agriculture, banking panic, and the depression.

JOHNSEN, O. A. *Norwegische Wirtschaftsgeschichte*. (Jena: Fischer. 1939. Pp. viii, 590. RM. 30.)

KIRKLAND, E. C. *A history of American economic life*. Rev. ed. (New York: Crofts. 1939. Pp. xvii, 810. \$3.75.)

First edition was reviewed in the issue of March, 1933, page 116. In the preface of this revised edition, the author states: "To the three eras into which I formerly divided economic history I have now added a fourth, entitled 'Technical change and government policy.' Roughly I have begun this period with the decade 1911-20; I have ended it, as far as possible, with the day before yesterday. . . . In addition to the new chapters, the last six of the former edition have been rewritten, some very extensively, and numerous changes have been made in the earlier chapters as well."

KNOOP, D. and JONES, G. P. *The Scottish mason and the mason word*. (Manchester: Manchester Univ. Press. 1939. Pp. x, 114. 7s. 6d.)

McFERRIN, J. B. *Caldwell and Company: a southern financial empire*. (Chapel Hill: Univ. of North Carolina Press. 1939. Pp. x, 284. \$3.50.)

MAY, J. M. F. *The coinage of Damastion and the lesser coinages of the Illyro-Paeonian region*. (New York: Oxford. 1939. Pp. 221. \$3.50.)

NEUFANG, O. *World federation*. Translated from the French by PIERRE GAULT. (New York: Barnes and Noble. 1939. Pp. xi, 121.)

PAGE, T. A. *Chilean social laws*. A dissertation. Reprinted from *American Federationist*. (Washington: Am. Fed. of Labor. 1939. Pp. 58.)

PRENTICE, E. P. *Hunger and history: the influence of hunger on human history*. (New York: Harper. 1939. Pp. xviii, 269. \$3.)

RIST, C. and PIROU, G., and others. *De la France d'avant guerre à la France d'aujourd'hui: vingt-cinq ans d'évolution de la structure économique et social française*. (Paris: Recueil Sirey. 1939. Pp. xxiv, 593. 80 fr.)

RUDIN, H. R. *Germans in the Cameroons, 1884-1914: a case study in modern imperialism*. (New Haven: Yale Univ. Press. 1938. Pp. 456. \$4.)

This excellent volume on the occupation, administration and exploitation of the Cameroons under the German rule should prove to be of great interest to the economist as well as to the historian and sociologist. Professor Rudin's knowledge of his subject seems to be derived from a personal visit as well as from a thorough study of the official archives and other sources of information.

Many interesting conclusions have been drawn from the study: The colony never provided an outlet for the German population and probably was never even intended for that purpose. The export trade was chiefly in rubber, palm products, cacao and ivory and constituted only a small part of total German trade. In fact, German imports of Cameroon products were even hampered by the import duty at home and the colonial export duty. The two monopolistic private concessions did not prove to be highly profitable. A considerable amount of money was spent, mostly by private interests, in this early, investment stage of imperialism for exploration, transportation facilities, subduing of natives, sanitation. In fact, since Germany held the colony for only thirty years, very little progress was made in exploiting it. One could hardly speak of the Cameroons as profitable, at least in this short period of time, unless such matters as betterment of the health of the natives and the prestige of being a colonial power could be evaluated. The trader and his almost undivided attention to his own selfish interests comes in for much criticism. In fact, much of the trader's attitude is reminiscent of the days of the American frontier.

A critical bibliography and map of the Cameroons are included.

WILLIAM CONRAD KESSLER

SCANDRETT, J. J. M. *The Nazi disease*. (Boston: Christopher Pub. House. 1939. Pp. vii, 141. \$1.50.)

The implied purpose of this book is to arouse in the lay reader an awareness of the nature of the problem of living in the same world with Nazi Germany. He is told that this Nazi disease is chronic, also contagious. The figure is pushed in the presentation of a diagnosis which reveals the disease to be *group predacity*. It is continued in the form of notes on a detailed case history, including the patient's symptoms from infancy in ancient and medieval Germany through the aggravation of the malady after 1914.

Hitler may be mad; but his seeming magic, it is contended, is the result of ideas which are centuries old. Without their support he would be powerless. Even in his best broadcasting of the doctrines of racial superiority, the gospel of force, and the subordination of the individual, he does not match in violence the vocabulary in which these same ideas were presented long ago.

The origin of the sickness is, in the author's opinion, prehistoric. Roman observers noted among the Teutonic tribes of the Baltic the mixture of idealism and brutality which characterize it today. The fifty pages in which are condensed the history of the Germans through medieval and modern times are excellent and serve the author's purpose well. Quotations from political and intellectual leaders give authentic testimony to the character of the philosophy by which the nation lived.

The malady progressed rapidly under the psychology of defeat and under the economic conditions which obtained after the war. Germany was by no means ready for democracy and the failure of social democracy was inevitable. It is true that "signs of something more wholesome" appeared from time to time. The youth movement was such a sign and the voice of Walter Rathenau was another. But the deep-rooted patterns of thought and feeling all favored the reactionary forces which prevailed.

The style of presentation is unusual and not always felicitous, in the opinion of the reviewer. The opening and closing chapters may startle the reader so that he will not fail to hear the warning they sound; but they detract from the impressiveness of the serious and actually enlightening study of the German political character which the author has made.

AMY HEWES

SCHLESINGER, A. M. *The colonial merchants and the American Revolution*. (New York: Barnes and Noble. 1939. Pp. 647. \$10.)

SCHMIDT, C. T. *The corporate state in action: Italy under fascism*. (New York: Oxford Univ. Press. 1939. Pp. 173. \$2.25.)

This book, which follows Dr. Schmidt's earlier monograph on fascist agricultural policy and draws somewhat on materials therein presented, provides a short, at times slightly hypercritical, yet, on the whole, competent and readable introduction to the subject of fascist economics.

After a thoughtful discussion of social and economic conditions in pre-fascist Italy, the rise of fascism to power and the measures taken for the consolidation of the dictatorial regime, there are four chapters describing, without detailed documentation, yet with evident command of the facts, the condition of the working classes, of agriculture, industry and trade under fascism and the causes and effects of the policy of extreme economic self-sufficiency recently adopted by the Italian government.

The resulting account of present-day Italian economic life, though succinct and somewhat over-critical, is, nevertheless, informative and essentially ac-

curate. It depicts the plight of both workers and employers under fascism; it suggests that the Italian corporate state is, in practice, not an agency for the economic self-government of the Italian people as fascist theorists maintain, but, rather, an instrument of economic control employed by the fascist state for the achievement of its ultimate political ends; it shows, finally, that the military preparedness, the colonial expansion, and the extreme economic self-sufficiency advocated by the fascists are being paid for, and are likely to continue to be paid for in the future, by the mass of the Italian people through a lowered standard of living.

WILLIAM G. WELK

SÉE, H. *Histoire économique de la France. Tome I. Le moyen âge et l'ancien régime.* (Paris: Armand Colin. 1939. Pp. xxv, 453. 70 fr.)

SMITH, R. and BEASLEY, N. *Carter Glass: a biography.* (New York: Longmans Green. 1939. Pp. xv, 519. \$3.)

STALEY, E. *World economy in transition: technology vs. politics; laissez faire vs. planning; power vs. welfare.* (New York: Council on Foreign Relations. 1939. Pp. xi, 340. \$3.)

THOMPSON, C. M. and JONES, F. M. *Economic development of the United States: a first course.* (New York: Macmillan. 1939. Pp. xiii, 794. \$3.50.)

UNWIN, G. *Gilds and companies of London.* (New York: Macmillan. 1939. Pp. 417. \$3.)

VEBLEN, T. *Imperial Germany and the Industrial Revolution.* New ed. (New York: Viking. 1939. Pp. xxi, 343. \$3.)

A reprint. Original edition was reviewed by Professor Sidney B. Fay, *American Economic Review*, June, 1916, pages 353-356. The present edition has an introduction by Joseph B. Dorfman.

WALTER, K. *The class conflict in Italy.* (London: P. S. King. 1938. Pp. x, 137. 5s.)

This book contains an undocumented, amazingly uncritical discussion of the position of Italian labor under the fascist regime, written by an admirer of the fascist corporate state. In Italy, Mr. Walter believes, genuine, democratic class collaboration in the national interest has been substituted for antiquated class conflict. Under fascism, he writes, "a new people is coming to birth, a new economic democracy. A new state, securely based upon the broad foundations of trade unionism, has taken its place among the great nations." This is the point of view which informs the whole monograph, from the introductory chapters on the historical and social backgrounds of the fascist movement to the later discussion of the fascist trade unions and their work.

What Mr. Walter sees is, of course, only the surface. That, it is true, appears to the casual observer to be calm enough. What keeps it calm, however, is not the wondrous new formula of social organization called the corporate state, but, rather, as objective students of fascism have repeatedly shown, the complete control and absolute domination of the Italian nation's political, social, and economic life by the ever-present, ever-watchful, and all-powerful fascist party.

WILLIAM G. WELK

WRIGHT, C. M. *Economic adaptation to a changing world market.* (Copenhagen: Einar Munksgaard. 1939. Pp. 305. 10s. 6d.)

Anuario bibliográfico de la sección revistas y publicaciones oficiales y periódicas en el xxv aniversario de la facultad de ciencias económicas. (Buenos Aires: Univ. de Buenos Aires. 1938. Pp. 316.)

Chronique des événements politiques et économiques dans le bassin danubien, 1918-1936: Roumanie. (Paris: Inst. Internat. de Coöp. Intellectuelle. 1938. Pp. 144.)

Japan: the thirty-eighth financial and economic annual, 1938. (Tokyo: Govt. Printing Office. 1939. Pp. vii, 323. 2 yen.)

Peaceful change: procedures; population pressure; the colonial question; raw materials and markets. Proc. of the 10th Internat. Stud. Conference, Paris, June 28-July 3, 1937. (Paris: Internat. Inst. of Intellectual Coöp. 1938. Pp. 685.)

This volume is a lineal descendant of *Collective Security* (Paris, 1936) which reported the proceedings of the Eighth International Studies Conference. Its theme is that "no society can function harmoniously if its institutions are not equipped to provide for the adaptation of its legal framework to the dynamic forces which irresistibly dominate it" (p. 18); and the goal set is the finding of means to "the peaceful settlement of international difficulties arising out of the aspirations of non-satisfied peoples" (p. 19).

The subject-matter of the Conference was divided into four parts: raw materials and markets; demographic questions; colonial questions; and Danubian problems. Numerous preliminary memoranda on each of these topics (some of which have been separately published) were prepared by experts, and part 1 of the present volume consists of the four introductory reports provided to the members of the Conference prior to its meeting, each report analyzing the preliminary memoranda relating to one of the main topics and focussing the points to be discussed. Part 2 contains the report of round-table discussions and plenary sessions. Part 3 contains a number of annexes, including a list of memoranda submitted and a valuable general bibliography on the subjects discussed.

The most interesting part of the volume is to be found in the give and take of opinion in the reports of the several round tables. In the discussion of raw materials, markets, and colonies the controversial tone was lessened by the absence of representatives from the "have-not" countries; but there was much less than a consensus upon appropriate lines of policy. Discussion ran somewhat at cross-purposes since some members insisted that the existence of relatively autarchic nationalistic states must be accepted as a fact and policy adjusted thereto, while others insisted that the scarcity complained of by such states derived from their own policies and would tend to disappear with a reopening of international intercourse. A variety of methods of improving access to basic materials was canvassed, but there was no disposition among representatives of colonial countries to admit that transfer of colonial territory was an acceptable element in any program. Ultimately the discussion reached the political dilemma that the countries most insistent upon access to materials want to use them for strengthening armaments with which to menace those who could provide them. Thus, in the end, after a thoroughly well-informed and thoughtful discussion, there developed little optimism concerning the prospects of "peaceful change" by the method of concessions of the "haves" to the "have-nots."

The present volume presents a compact summary of fact and opinion and a valuable documentation of the subjects covered, to which will be

added a large body of scientific material as the underlying technical studies are published.

P. T. HOMAN

République turque: annuaire statistique. Vol. I. 1936-37. (Ankara: Office Central de Statistique. Pp. 481.)

The annual statistical abstract of the Turkish Republic for 1936-37, covering many data for the last ten years. Titles are in latinized Turkish and in French.

P. H.

Statistical abstract of the United States, 1938. (Washington: U. S. Dept. of Commerce. 1939. Pp. xviii, 882. \$1.50.)

Statistisches Jahrbuch deutscher Gemeinden. 34 Jhrg., Lief. 1. (Jena: Fischer. 1939. RM. 25.)

Agriculture, Mining, Forestry, and Fisheries

The International Distribution of Raw Materials. By HERMAN KRANOLD. (New York: Harper. 1939. Pp. xxiv, 269. \$3.50.)

After leaving Germany and before coming to the United States, the author taught economics in England to classes drawn largely from the laboring population. This book is an outgrowth of that teaching experience. Its object is twofold.

On the one hand, the author wishes to prove that certain widely held beliefs are unscientific and not based on fact. Of these false beliefs two are dealt with at considerable length—namely, the myths of the particular poverty of the so-called "have-not" nations, Germany, Italy and Japan, and of the importance of colonies as producers of raw materials. Other false beliefs are treated more briefly, such as the idea that price control schemes are injurious to consumer interests; that some purveyors of raw materials discriminate on the basis of nationality against some buyers; and, finally, that financial control over foreign raw materials enables creditor nations to obtain these materials on terms more advantageous than those offered to others. In each case, the author's findings are negative. In his opinion, all these beliefs are false, mere "red herrings drawn across the trail of truth."

On the other hand, the book contains a good deal of worth-while information and intelligent interpretation, as well as constructive suggestions looking toward a saner and safer economic order on this earth.

Over half of the book is taken up with statistical tables based on English and German source material. Most of them are given in the appendix; others are scattered over the first chapter, in which a review of "internationally interesting raw materials" is given. This chapter is particularly rich in useful comments, revealing a more than ordinary grasp of significant relationships and interactions. Among introductions to the study of international raw materials this chapter ranks high.

Building on this elaborate statistical and explanatory foundation, the author proceeds "to find out, if it is possible, with some real meaning, to measure the strength of the more important countries in terms of a series of comprehensive figures" (p. 99). In the analysis, which is confined to 15 countries and 73 raw materials, the following statistical method is used:

1. Each country receives 1 point or mark, rounded off to the nearest integer, for any amount more than 5 but less than 15 per cent of the total world production of one of the 73 commodities;
2. These unweighted points, or marks, are multiplied by a "weighting index" expressing in thousands the portion which the value of the exports of each commodity makes up of the total value of world exports;
3. The total number of 2,785 weighted marks thus obtained is distributed in per cent among the 15 countries;
4. Populations of the 15 countries are added and for each country the percentage of this total is ascertained;
5. The weighted index figures (obtained in step 3) are then divided by these per cent figures for the population. The resultant quotient is the "index of wealth in raw materials."

It is evident from the foregoing that this is an index of per capita wealth in raw materials.

Before giving the results an added explanation is necessary. In countries owning colonies, both the output of raw materials and the population of the colonies is counted. With Great Britain are included crown colonies, protectorates and mandated territories. India with Burma and the self-governing dominions, on the other hand, are counted separately. The population figures in millions for colonial powers thus arrived at are as follows: Japan, 129; France, 106; Great Britain, 104; Holland, 69; Italy, 54.

The result of Mr. Kranold's procedure is somewhat startling. He finds that there are four "plutocrats": Canada (8.3), Australia (7.5), Union of South Africa (6), and the United States (4.4); there are four "upper middle-class" nations: Russia (1.6), Great Britain (1.5), Germany (1.3) and Italy (1); there are four "lower middle-class" nations: Holland (.8), Brazil (.8), Japan (.7) and France (.6); and three "proletarians": Poland (.5), India (.4) and China (.1). (The figures in parenthesis are the "indexes of wealth in raw materials.")

Thus, according to the author, the myth of the particular poverty of the "have-nots"—Germany, Italy and Japan—is exploded. For we find Germany and Italy grouped with Russia and Great Britain as "upper middle-class," while France and Holland rank with Brazil and Japan as lower middle-class. Moreover, the author claims that his novel re-grouping of nations at the same time effectively disposes of the claim that colonies are important factors in the international distribution of raw materials. To him the tabulation proves that colonies are not criteria of strength. For colony-owning Holland and France rank far below colony-less Germany.

A critical appraisal of the statistical procedure by which these conclusions are reached throws some doubt on their validity. The original points or marks, unweighted and unadjusted, give the following grouping: United States, 112; Russia, 73; India, 62; Great Britain, 48; Canada, 46; France, 38; Germany, 36; Japan, 32; China, 18; Italy, 17; Union of South Africa, 17; Holland, 13; Australia, 11; Brazil, 7; and Poland, 5. Or, British Commonwealth of Nations, including the empire, 184; United States, 112; Russia, 73; France, 39; or these four Great Powers together, 407 out of a total of 515 marks, leaving 108 for all the rest.

So far the figures definitely support the popular beliefs which the author has set out to dispel. They are therefore subjected to statistical manipulation, the first of which is multiplication with a "weighting index." As was shown, the basis chosen for weighting, that is, for determining the relative importance, is the relative share in total export value. It can hardly be said that this is a happy choice. Certain commodities, such as textile fibers, for various reasons, move across international boundaries far more freely than others, such as brick, machinery, electric power, etc. Oil moves more readily than coal. This variation in behavior, which itself has little, if anything, to do with the relative importance of the different commodities, renders questionable the criterion which the author has chosen for the purpose of weighting. It might be the best criterion available. In that case, even the best is not good enough. A list of weighting indexes shows the distorted effects of the method chosen by the author: iron ore, 5; iron, 4; steel, 4; coal, 29; oil, 46; wheat, 20; corn, 8; rice, 13; sugar cane (should probably read cane sugar), 9; sugar beets (should probably read beet sugar), 9; rubber, 13; wood pulp, 10; cotton, 43; silk, 8; electrical energy, 10.

Nevertheless, the weighting, though scientifically by no means unassailable, does not materially change the original arrangement of countries; for we find that the British Commonwealth of Nations has 825 weighted marks, the United States 894 (of these 276 are for petroleum and 172 for cotton), Russia, 422; and France, 123, giving these four groups 2,264 out of a total of 2,785, leaving 521 weighted marks to the rest.¹

While the author's method of weighting could be questioned, his next step, that of dividing his weighted raw material production indexes by the population percentage figures, is clearly indefensible. It is not legitimate statistical practice to divide by a figure which does not represent a homogeneous reality. Dividing the output of raw materials by the total number of inhabitants implies that all inhabitants share in the benefits in a manner

¹ Germany, which lags behind France in the unweighted classification, moves ahead in the weighted column, and that because of the error of not differentiating between lignite and coal. In generally accepted practice, four tons of lignite count as the equivalent of one ton of coal. As a result of this error, Germany receives 29 points in excess of her rightful share, raising her total to 140 instead of 111, as compared with 123 for France.

at least approaching equality. A painstaking statistician, conscious of social inequalities among members of the same country or community, might well hesitate to consider all the people living in a single country as sufficiently homogeneous in this sense. But he will not hesitate to pronounce the assumption of homogeneity in the case of an entire colonial empire as contrary to fact and hence apt to hide rather than reveal the truth. Are the Senegalese troops serving in the French army beneficiaries of vanadium, nickel, potash, phosphate, and other raw materials produced in French territories in the same sense and to the same extent as are the inhabitants of Paris or Marseilles, or are colonial troops rather to be added to colonial wealth? Are coolie laborers assets of the motherland or beneficiaries of the colonial estate? Whatever reply is given, homogeneity seems an unwarranted assumption.

In order to show how the author's statistical results are warped by this methodological flaw, revised figures, obtained by omitting the inhabitants of colonial territories from the divisor, are given below:

1. Canada	7	5. U.S.A.	3.8	11. Germany	.9
2. Australia	6	6. Great Britain	2.9	12. Brazil	.7
3. Netherlands	6	7. France	1.5	13. India	.4
4. Union of South Africa	5	8. Russia	1.3	14. Poland	.4
		9. Japan	1.1	15. China	.07
		10. Italy	1.0		

Or British Commonwealth of Nations (including the empire), 21.3; Netherlands (including the empire), 6; United States, 3.8; France, 1.5; Russia, 1.3, with Japan, Italy and Germany again trailing behind with 1.1, 1.0 and .9, respectively.

It is not claimed that these figures come closer to revealing the true relative strength of nations. Their presentation merely serves to show that the author's figures are unreliable because they have been arrived at by a faulty statistical method.

It is easy to exaggerate the "strength" of the three self-governing dominions. All three suffer from an unusual space handicap, a corollary of low population density. In such countries a good deal of "strength" is dissipated in overcoming this handicap. All three, moreover, are dependent on borrowed capital and must, therefore, share their wealth with their creditors. The case of the Union of South Africa is further complicated by the large output of gold, which accounts for 40 out of her 81 weighted points or marks. Incidentally, 7 of her 17 unweighted marks are accounted for by osmium and iridium.

Most discussions of this "have and have-not" business are confined to the Great Powers. Conformance with this practice would call for the omission of Brazil, Poland and China. In view of the essentially political nature of this question, such matters as possible or likely alliances, relative naval strength, political possession of, or control over, strategic points such as

Gibraltar, the Suez Canal, the Panama Canal, the Falkland Islands, Singapore, and the ability to take advantage of "cash and carry clauses" in neutrality laws must be taken into consideration. This further undermines the author's claim to have exploded the myth of (1) the importance of colonial production and (2) the particular poverty of the "have-nots."

Similarly, the author's position that international price control schemes and discriminatory trade laws are mythical is hardly tenable. Following Sir Norman Angell, the author asserts that Germany has equal access with the British to the raw materials supply of the earth. While it is true that there is little if any outright discrimination in export tariffs, the same unfortunately cannot be said of import duties, quotas, and other less overt measures applied to imports. Imperial preference, to give but one example, by placing greater obstacles in the way of the sale of Japanese and German goods in the territories of the British Commonwealth of Nations, indirectly works as a discrimination in the sale to Germany of raw materials from these areas. Examples of more flagrant discrimination can no doubt be found, but this is discrimination.²

Similarly, the argument that international raw material price control schemes do not harm consumers, because in a world suffering from overproduction the real difficulty is that of getting rid of surpluses rather than that of obtaining supplies, is none too sound; for it generalizes too readily from a condition of the raw materials markets of the world which is not apt to prove either universal or permanent. As the price controlling interests are learning from experience, they may become more efficient in production control procedure and thus remove the basis of the author's argument.

In the light of all this, it can hardly be said that the author has succeeded in his negative task, that of bubble-pricking, myth-exploding, and "red herring" exposing. He has done much better in his positive task of advocating a saner world order. Leaning toward socialism, he has no great love for any of the capitalistic regimes and is a strong believer in international, *i.e.*, cosmopolitan, control, a control which holds open the world's markets and sources of supply alike to all on equal terms, and thus releases for constructive work the powerful forces which today are marking time behind barriers of both matter and mind. In this section of the book the author rises to heights of wisdom and tolerant understanding which makes one happy to forget some of the weaker parts.

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² Replying to Sir Norman Angell's version of the Kranold argument, Alvin H. Hansen writes: "Germans can certainly not obtain wool from Australia on equal terms with the British" (*Full Recovery and Stagnation*, p. 237); and again: "The truth is that very many countries in the world today find access to raw materials well-nigh blocked, not because they cannot buy but because they cannot sell on terms of substantial equality" (*ibid.*, p. 238).

The Birth of the Oil Industry. By PAUL H. GIDDENS. (New York: Macmillan. 1938. Pp. xxxix, 216. \$3.00.)

About 1868 Edwin C. Bell, then in his early twenties, came to the oil fields of Western Pennsylvania and engaged in printing and newspaper work in Titusville. With unusual historical foresight, Bell acquired during a period of fifty years a large assortment of materials relating to the new-born and rapidly developing oil industry. Today these rich materials form the nucleus of the more extensive collection at the museum of the Drake Well Memorial Park, near Titusville.

Based largely on a study of these materials, supplemented by personal interviews with librarians, newspaper editors, oil men and local historians, Professor Giddens' study represents a clearly written, concisely stated and smoothly developed story of the oil industry in its formative years.

Although the name of Rockefeller is indelibly associated with the oil industry which he came to dominate during the last quarter of the nineteenth century, the insignificant contribution which Rockefeller made to the industry in its infancy is reflected in the fact that his name does not once appear in Professor Giddens' study. The Rockefeller genius lay in his organizing ability and his financial and business acumen. The birth of an oil industry involved imaginative foresight, speculative daring and a ruggedness characteristic of the American pioneer. Men of these qualities, and some of lesser virtues, came in hordes to the oil field regions following the completion of "Drake's Folly" in 1859. It is with their doings that Giddens' study is largely concerned.

Beginning with a brief account of the earliest available knowledge of oil on the American continent, the study proceeds to a consideration of the supply-demand situation in illuminants at the middle of the nineteenth century. With a decline of whale fisheries and an inadequate supply of lard oil, the birth of the oil industry awaited only the discovery of crude oil in commercial quantities and the development of a refining technique. These were readily forthcoming.

The story of the Pennsylvania Rock Oil Company and its successor, the Seneca Oil Company, of "Drake's Folly" and the resulting oil boom, of the development of refineries, the organization of marketing, of the confusion of transportation and the development of the first pipe lines, of vast fortunes made and lost overnight, of over-production and resulting depression, is related clearly and in detail.

This book will prove of interest primarily to economic historians. But economists concerned with the structure, organization, and functioning of an industry under conditions roughly approximating the ideals of perfect competition will find material of value in its pages.

GEORGE WARD STOCKING

University of Texas

NEW BOOKS

- ADAMS, T. M. *Prices paid by farmers for goods and services and received by them for farm products, 1790-1871; wages of farm labor, 1780-1937. A preliminary report.* (Burlington: Vermont Agric. Exper. Station. 1939. Pp. 54, mimeographed.)
- ALSBERG, C. L. *Durum wheats and their utilization.* Wheat studies, vol. xv, no. 7. (Stanford University, Calif.: Food Research Inst. 1939. Pp. 337-364. 75c.)
- BAKER, A. E. *A graphic summary of farm animals and animal products (based largely on the census of 1930 and 1935).* U. S. Dept. of Agric. misc. pub. no. 269. (Washington: Supt. Docs. 1939. Pp. 88. 10c.)
- BRITNELL, G. E. *The wheat economy.* (Chicago: Univ. of Chicago Press. Toronto: Univ. of Toronto Press. 1939. Pp. xvi, 259. \$2.50.)
- DANTWALA, M. L. *Marketing of raw cotton in India.* (New York: Longmans Green. 1938. Pp. xxv, 268. \$3.75.)

It is refreshing to turn from the thought of our 13,000,000 bales of cotton carry-over to a review of the more elementary marketing problems of the second largest cotton growing country of the world. We have come so completely to take for granted the market machinery of standard grades, warehousing and dissemination of price data that one almost wonders how a crop the size of that in India can be marketed without universal standard grades, with watering and adulteration commonly accepted practices, and with the crop dependent for its financing upon private resources and loans from usurious private money lenders.

Mr. Dantwala's survey of cotton marketing in India is undoubtedly a most valuable contribution to the trade in that country as it is the first systematic survey of the field that has been made. To American readers familiar with the general outline of commodity markets, its chief interest will lie in the historical review of the Indian cotton trade and in the author's proposals for reform in marketing practices. These may be summed up as regulations of the cotton market and the institution of producers' coöperatives. To us it seems difficult to believe that so good a case can be made against the adoption of standard grades for a raw material like cotton that the cotton trade itself by and large does not want them. The institution of effective regulation will, under such conditions, come slowly. On the other hand, Mr. Dantwala is enthusiastic about the possibility for coöperatives in view of the accomplishment of those already in existence, and it is to be hoped that his book will be widely read for what effect it may have in strengthening this movement.

S. J. KENNEDY

- DEL VILLAR, C. A. and GIACHELLO, D. *Sistema de tarifas para elevadores de granos de servicio público. Los gastos directos en el costo de explotación de los elevadores terminales.* Pub. no. 35. (Buenos Aires: Comisión Nac. de Granos y Elevadores. 1939. Pp. 93.)
- DEUPREE, R. G. *The wholesale marketing of fruits and vegetables in Baltimore.* Stud. in hist. and pol. sci., ser. 57, no. 2. (Baltimore: Johns Hopkins Press. 1939. Pp. 125. \$1.25)
- ELSWORTH, R. H. *Statistics of farmers' marketing and purchasing coöperatives, 1937-38 marketing season.* Misc. rep. no. 18. (Washington: Farm Credit Admin. 1939. Pp. 23.)

- ELWOOD, R. B., and others. *Changes in technology and labor requirements in crop production: wheat and oats*. Rep. no. A-10. (Philadelphia: WPA, Nat. Research Project. 1939. Pp. xv, 182.)
- GARSDIE, A. H. *Wool and the wool trade*. (New York: Stokes. 1939. Pp. xv, 331. \$2.50.)
- GUSTAFSON, A. F., and others. *Conservation in the United States, by members of the faculty of Cornell University*. (Ithaca: Comstock Pub. Co. 1939. Pp. 456. \$3.)
- HOOKE, E. R. *Readjustments of agricultural tenure in Ireland*. (Chapel Hill: Univ. of North Carolina Press. 1938. Pp. xii, 245. \$4.)

This little volume appears at a particularly opportune time in view of the current interest in agricultural tenure in the United States. The historical background and the various steps in the development of tenure programs in Ireland are well outlined by the author. The first chapter sketches briefly the historical background and the second reviews various reform acts. Four chapters consider different stages of the change from tenants to owners. These periods are referred to as "Experiment" (1869-1885), "Expansion" (1885-1903), "General land purchase" (1903-1922), and "Completion of farm ownership program" (1922-). Subsequent chapters discuss rehabilitation of a submarginal area, land redistribution and a housing program for rural laborers.

Students of agricultural tenure are well aware of the fact that problems and conditions differ so greatly in different countries that a program developed to fit one situation may not be adapted for use elsewhere. Those whose interest in the problem is more casual probably do not always appreciate this fact fully. Because of this it would have seemed worth while for the author to have given some space to the application of the experience of Ireland to a few of the problems in the United States. Lack of adequate interpretation of this kind will limit the usefulness of the book for the general reader. However, students of farm tenure will find in this well-organized book much of interest to them. The author has shown commendable care in citing sources of material.

O. B. JESNESS

- KIFER, R. S. and STEWART, H. L. *Farming hazards in the drought area*. WPA res. monog. xvi. (Washington: Supt. Docs. 1938. Pp. xxviii, 219.)
- MILHAU, J. *Prix et production en agriculture: étude économétrique de quelques marchés agricoles*. (Paris: Recueil Sirey. 1938. Pp. xiii, 76.)
- OLCOTT, M. T., compiler. *Rural psychology: a partial list of references*. Agric. econ. bibliog. no. 78. (Washington: U. S. Dept. of Agric. 1939. Pp. vi, 76, mimeographed.)
- PARKINS, A. E. and WHITAKER, J. R., editors. *Our natural resources and their conservation*. 2nd ed. (New York: Wiley. 1939. Pp. xiv, 647. \$4.)
- PHILLIPS, H. A., and others. *Agriculture and farm life*. (New York: Macmillan. 1939. Pp. 509. \$1.48.)
- SMITH, T. V. and TAFT, R. A. *The American farmer—citizen or peasant?* Foundations of democracy no. 11. (New York: Columbia Univ. Press. 1939. Pp. 23. 10c.)

TAYLOR, A. E. *Why agricultural gluts develop*. Day and hour ser. no. 21. (Minneapolis: Univ. of Minnesota Press. 1939. Pp. 29. 25c.)

Present and prospective surpluses in bread and feed grains, in cotton, sugar,

animal fats and vegetable oils, are causing widespread concern among both agricultural and business leaders. Many have come to see that these are not temporary or exceptional gluts. Taylor finds that "we gradually come to appreciate that, apart from exceptional crop failures, we seem to tend toward a carry-over, at the end of each crop year, larger than the amount which passed into international trade during that year."

The world wheat outturn has doubled in less than half a century. What accounts for this unexpectedly large achievement? Taylor in this pamphlet finds that there have been great improvements in the production of wheat but that these are not peculiar to wheat. They apply largely to all major crops and are comparable with technological advances in industry. In contrast to these supply forces, the rate of growth of population in the white world is receding. In addition, the annual intake of food in terms of calories has been slowly receding. The author maintains that the picture he has drawn for wheat could be comparably reproduced in the coarse grains, sugar, cotton, animal fats (outside of butter), and vegetable oil, all in the international sense. The contrast between expanding supply and contracting or stationary demand would hold more or less for all. The fact that in the case of foodstuffs no new demand is invokable, apart from hypothetical improvement of the diet of lower-income classes in white countries, as it is invokable technologically in the case of other raw materials, adds to the agricultural glut problem.

Little fault can be found with the author's analysis and his conclusions regarding prospective agricultural surpluses. But this reviewer disagrees sharply with his statement in the concluding sentences. He argues that in most wheat-growing countries there are significant areas which are clearly submarginal for that purpose and this is the obvious place to begin retraction of wheat acreage, but few signs of such adjustment are to be seen to date. This is certainly not a correct statement as far as the United States is concerned. In the Northern Great Plains alone, the federal government has purchased or will have purchased by June 30, 1939, nearly five million acres, most of which is land that was cropped to wheat and is being returned to grass. This constitutes nearly a fourth of the area in which these adjustments are being made. Certainly this cannot be referred to as "few signs" of adjustments. These and related adjustments should not be made too hastily for best results. The important thing is that adjustments now under way in many of these areas seem headed in the right direction, in view of the apparent inevitableness of recurring heavy wheat surpluses pointed out in this pamphlet.

ROLAND R. RENNE

TIMOSHENKO, V. P. and WORKING, H. *World wheat survey and outlook, May, 1939*. Wheat studies, vol. xv, no. 8. (Stanford University, Calif.: Food Research Inst. 1939. Pp. 365-400. 75c.)

WADHAM, S. M. and WOOD, G. L. *Land utilization in Australia*. (Melbourne: Melbourne Univ. Press, New York: Oxford Univ. Press. 1939. Pp. xix, 360. 21s.)

Agricultural income inquiry. Part I. *Principal farm products*. Part II. *Fruits, vegetables, and grapes*. Part III. *Supplementary report*. (Washington: Supt. Docs. 1939. \$1.25; \$1; 20c.)

Mineral industry of Alaska in 1937. Geological survey bull. 910-A. (Washington: Supt. Docs. 1939. Pp. 113. 35c.)

Periodicals issued by farmers' marketing and purchasing associations. Misc. rep. no. 5, rev. (Washington: Farm Credit Admin. 1939. Pp. 19.)

Proceedings of the Fifth International Conference of Agricultural Economists, held at Macdonald College, Canada, 21 August to 28 August, 1938. (New York: Oxford. 1939. Pp. 450. \$6.)

A statistical handbook of farmers' coöperatives. Bull. 26. (Washington: Farm Credit Admin., Coöp. Div. 1939. Pp. 334. 35c.)

The world coal-mining industry. Vol. I. *Economic conditions.* Vol. II. *Social conditions.* Stud. and rep., ser. B, no. 31. (Geneva and Washington: Internat. Labour Office. 1938. Pp. vii, 258; viii, 372. \$2; \$2.)

This two-volume study of the world coal-mining industry was originally prepared by the International Labor Office for the use of delegates to the Technical Tripartite conference on the coal-mining industry which was held at Geneva in May, 1938. The primary purpose of the report was to afford the necessary background material for a consideration by the conference of the question of reducing the hours of work in coal mines.

The first volume deals with the economic factors that have influenced the development of coal mining in the various countries. Relative changes in the competitive position of the industry in all of the more important producing countries are shown by means of tables and graphs. Special attention is given to the growth of regulatory measures and their effect upon world trade in coal.

The second volume surveys the social conditions that prevail in the coal industry. It affords a rather detailed summary of the more important phases of social legislation in each of the larger producing countries. Both volumes are indexed, and the second volume has a statistical appendix covering employment, unemployment, wages, hours of work for coal miners in the various countries.

This report is a veritable encyclopedia of information on the world coal-mining industry. The material is well organized and is presented factually without any evidence of bias. A great deal of the statistical data has been converted to index numbers to facilitate international comparisons. The consistent use of a single year base period, however, tends to be misleading, since the implicit assumption of a normal or otherwise acceptable relationship among the various countries in 1929 is open to question. Nevertheless the two volumes cover the subject thoroughly and measure up to the high standard of workmanship that the International Labour Office has set in its past reports.

JOHN W. McBRIDE

Manufacturing Industries

NEW BOOKS

BLISS, C. A. *The structure of manufacturing production: a cross-section view.* (New York: Nat. Bur. of Econ. Research. 1939. Pp. xvii, 231. \$2.50.)

COURT, A. T. *Men, methods and machines in automobile manufacturing.* (New York: Automobile Manufacturers Assoc. 1939. Pp. 24.)

HENNEFRUND, H. E., compiler. *The frozen food industry: selected references, January, 1937, to March, 1939.* Econ. lib. list no. 2. (Washington: U. S. Bur. of Agric. Econ. 1939. Pp. 14, mimeographed.)

VON KELLER, R. *Die Verlagerung der grossstädtischen Industrie: eine wirtschaftspolitische Studie*. (Leipzig: Felix Meiner. 1938. Pp. vii, 160. RM. 7.50.)

Robert von Keller is already known through his interesting study *Die Kausalzusammenhänge in der Konjunkturbewegung* (Leipzig, 1934). His new book, called a *political study*, sets an aim for long-term planning and is therefore of interest for all those who believe in the importance of large-scale public planning and spending programs. Dr. von Keller does not stress the importance of his proposal as a new investment opportunity. He is rather anxious to prove that his program could be carried through with not too much of additional government spending. His interest belongs, first of all, to the social problem of the industrial worker in big cities. His aim is "deglomeration" by shifting those industries whose character does not necessitate their location in big cities. Through moving selected industries to carefully chosen places he wants to induce the more or less automatic shifting of complementary industries. According to Dr. von Keller the plan will have to meet considerable difficulties. He hopes, however, that a combination of subsidies, tax exemptions, discriminatory freight rates, etc., will offer inducement enough to the entrepreneur to change the location of his plant. Since the industrial worker must by no means be isolated in a dangerous way, the movable industries should not be distributed all over the country but rather be concentrated in smaller towns.

Dr. von Keller estimates the financial problem of his plan for German conditions and shows how the cost of the change, if planned a long time ahead, could largely be met by those expenditures which have to be made anyway. He designs a framework for housing programs which, at not too great extra cost, would achieve an advantage worth considering. This problem of timing, however, could be worked out more carefully.

Dr. von Keller's project should be regarded in connection with the idea that public works projects will have to fulfill the function of partly replacing lacking investment opportunities in private industry. The financial problem would be much easier to solve under this assumption than under the case of full employment which the author (regarding German conditions only) assumes. It is decidedly Dr. von Keller's aim that his plan should be carried through with as little interference as possible and should be based on the experience of the private entrepreneur. Whether this plan fits into the German economy of today is highly questionable. Dr. von Keller seems to belong to the rather large group of German economists who believe in private initiative and who pretend that the character of the German economy has not been changed fundamentally.

GEORGE N. HALM

MARSHALL, T. *Federal encroachment on industry*. (Boston: Christopher Pub. House. 1939. Pp. x, 128. \$1.50.)

Written by a lawyer who argues that Congress has subordinated the powers of the sovereign states. The federal grasp for power is illustrated by the creation of the Agricultural Administration, the Home Owners' Loan Corporation, as well as other agencies. Illustrations are also drawn from court decisions.

MOULTON, E. S. *Marketing research activities of manufacturers*. [Market res.

- ser. no. 21. (Washington: U. S. Dept. of Commerce, Marketing Res. Div. 1939. Pp. ix, 49. 25c.)
- STERN, B. *Labor productivity in the boot and shoe industry*. Reprinted from *Monthly Labor Review*, Feb., 1939. Rep. no. B-6. (Philadelphia: WPA, Nat. Res. Project. 1939. Pp. 22.)
- WEST, M. E. *Productivity and employment in selected industries: brick and tile*. Rep. no. N-2. (Philadelphia: WPA, Nat. Res. Project. 1939. Pp. xxv, 212.)
- A memorandum on the problem of big business submitted to the Temporary National Economic Committee by the Corporation Survey Committee of the Twentieth Century Fund*. (New York: Twentieth Century Fund. 1939. Pp. 35.)

Transportation and Communication

NEW BOOKS

- CUNNINGHAM, W. J. *The present railroad crisis*. (Philadelphia: Univ. of Pennsylvania Press. 1939. Pp. x, 84. \$1.)
- GLAZEBROOK, B. P. DE T. *A history of transportation in Canada*. (New Haven: Yale Univ. Press. Toronto: Ryerson Press. 1938. Pp. xxv, 475. \$4.)

This book is a contribution to the series of studies of Canadian-United States relations now in course of publication under the auspices of the Carnegie Endowment for International Peace. To be justified of inclusion in such a series, it should have addressed itself primarily to the story of the manner in which the transportation system of Canada has taken shape in most intimate association (and strenuous competition) with the commerce and transportation of the United States. Nevertheless, the author, having conceded (p. 151) that the dominating motive of the first railway era in Canada was the control of the communications of the United States, immediately dismisses it as a "will-o'-the-wisp." Thereafter he pays only a negligible attention to the tremendous influence that this motive, vain as it may have been, has played in the subsequent development of Canadian transportation, and especially in his own province of Ontario; and he is equally unmindful of another motive of similar potency, the protection of Canadian traffic from deflection to United States routes. Yet another line of treatment of the subject—of comparable importance in itself, although less appropriate to the general theme of the series—would have been a consideration of the manner in which the expansion of the Canadian network of transportation has contributed to join the nine widely-separated provinces of Canada within a single nominally national union. But even this essentially Canadian aspect of the subject has also been disregarded, and that, in large part, through a most inadequate attention to the story of the development of inland water navigation in Canada and to the place such navigation has taken in Canadian economic life.

The principal contributions of the book are to be found in its accounts of the earlier years of the Grand Trunk enterprise (based upon the Baring papers in the Dominion Archives), of the early competition of the Canadian Pacific with the Grand Trunk and other opponents (based upon the Macdonald papers in the Dominion Archives), and of the gradual development of the Canadian National system. It also pays detailed attention, at dis-

proportionate length, to the dubiously pertinent topic of transportation to and in the Northwest, in the days of the fur trade (drawing here from the recently opened Hudson's Bay Company archives). It may therefore be said of it that it furnishes some sort of historical preface, though incomplete and ill-arranged, to the Canadian railway problem of the present day.

C. P. WRIGHT

THORNTON, R. H. *British shipping*. (New York: Macmillan. 1939. Pp. 311. \$2.50.)

WENZEL. *Die Gütertarifpolitik der deutschen Reichsbahn mit besonderer Berücksichtigung des Ruhrgebietes*. Verkehrswissenschaftliche Forschungen, Heft 15. (Jena: Fischer. 1939. Pp. 31. RM. 1.50.)

Trade, Commerce, and Commercial Crises

NEW BOOKS

DIETRICH, E. B. *World trade*. (New York: Holt. 1939. Pp. vi. 458. \$2.75.)

This is the first book published in this country in about a decade that has attempted to cover the field of international commercial policies. A new and comprehensive book on this subject was greatly needed. Not only were other books out of date; many of the policies now of greatest importance were hardly known ten years ago. The relative newness of many of the measures discussed made Professor Dietrich's task a difficult one. The result of her efforts is distinctly useful, but its value lies chiefly in the facts presented rather than in a critical analysis of particular measures. She has endeavored to approach the subject in a "realistic" manner. "Instruments of commercial policy," she remarks, "must be streamlined in the quest for market opportunities for streamlined products" (p. 393). In the effort to be realistic, the author departs more widely from generally accepted economic judgments than is warranted by the analysis she presents. Many of the views expressed are more lay than professional in tone. As examples may be mentioned her defense of exchange control as having "saved a large number of debtor countries from financial chaos" (p. 148), her acceptance of some of the cruder fallacies respecting colonies, and her treatment of the problem of a merchant marine.

C. R. WHITTLESEY

HARWOOD, E. C. *Cause and control of the business cycle*. 2nd rev. ed. (Cambridge: Am. Inst. for Econ. Research. 1939. Pp. vii, 224.)

The author's primary intention is to discuss in a popular form one of the main causes of the cycle, notably that "condition precedent" which, of those recognizable as such "will be most easily controlled or regulated." In connection with this the book expresses the author's views on some fundamental problems of monetary policy.

As to the main object, Mr. Harwood makes it clear in a simple model how credit creation may lead to an inflationary process, the essence of which is demonstrated by the fact that aggregate demand becomes greater than the cost of production for that output which is actually bought on the market. It is then shown how, the legal limits of credit expansion having been reached, a restriction of the credit volume may lead to a cumulative process

in the deflationary sense. The author has constructed an "index of inflation" which is based on the difference between what he calls "investment-type assets" of the American banking system and what he calls its "savings-type liabilities." The former item contains lendings "on the security of property and goods which were not coming to market," whereas the latter item should evidently correspond to something like Robertsonian savings. It cannot be seen from the text how these items are derived, but the reader is told that the explanation is available from the American Institute for Economic Research. As it is obvious that such a classification cannot be carried out statistically with any theoretical precision (aggregate savings not being statistically measurable in any other sense than that in which they would equal aggregate investment by definition), the author must be understood to mean that he regards the data he has collected as *characteristic* for the development of the two items respectively. His table (p. 69-75) and the corresponding chart (p. 77) refer to the period 1914-38, and they indicate a greater rate of increase of the "investment-type assets" than of the "savings-type liabilities" for the ascending phases of this period whereas a greater rate of increase of the latter than of the former is indicated for the descending phases.

Mr. Harwood is sharply opposed to government spending in the depression, mainly for the reason that it is "inflationary" in the above sense.

WILLIAM FELLNER

HENDERSON, W. O. *The Zollverein*. (Cambridge: Cambridge Univ. Press. New York: Macmillan. 1938. Pp. xi, 375. \$4.50.)

A hundred years have yielded a vast literature on the subject of the German Zollverein. But this literature is widely scattered and much of it deals with special periods or special phases or is merely incidental to more general historical and economic writings. Dr. Henderson has added little to previous findings except some side-lights from archives in Vienna and London. He has, however, integrated his findings and those of his predecessors into a clear, well-organized, interesting history of the Zollverein.

This has been accomplished without over-simplification. The story of the Zollverein is skillfully interwoven with that of other economic, political, and diplomatic developments; the interaction between these and the Zollverein is brought out at each stage; and the place of the Zollverein among the various factors making for the economic progress of Germany, its unification, and the establishment of the empire, is judicially evaluated.

The author shows acquaintance with an almost overwhelming amount of material in divers forms and places and in various languages. The scholar will welcome the wealth of bibliographical data accompanying each chapter. An exhaustive index fills some twenty-five pages.

This volume will take its place as the standard work in English on the subject. If it does not prove to be a definitive work, it certainly will be of great service to laymen and specialists alike. There is timeliness also in its appearance just when another re-making of Germany is in progress.

PAUL S. PEIRCE

KOOPMANS, T. *Tanker freight rates and tankship building: an analysis of cyclical fluctuations*. Nr. 27. (Haarlem: Netherlands Econ. Inst. London: P. S. King. 1939. Pp. xii, 219. f. 3.)

LENICQUE, G. *La réorganisation des grandes industries d'exportation en Angleterre*. (Paris: Recueil Sirey. 1939. Pp. 120.)

PEARCE, C. A. *NRA trade practice programs*. (New York: Columbia Univ. Press. 1939. Pp. ix, 225. \$2.75.)

In this book a former NRA economist classifies and analyzes the trade practice provisions of its codes. Although the appendix requires ten pages merely to list them, omitting "minor types and variants," most of the important ones can be summarized as follows: (1) control of prices—price fixing by the code authority (effective in only four codes), prohibition of sales below individual cost (forty cases), and open price filing (two-thirds of the total); (2) control of terms of sale—restrictions on quantity discounts, credit terms, delivery allowances, etc. (the commonest type of rule); (3) control of production—fixing of quotas (four codes), time limits on plant operation (chiefly textiles and apparel), and restrictions on new investment (thirty cases); and (4) control of unfair trade practices—rules against misrepresentation (occasionally), style piracy (chiefly textiles and apparel), loss leader merchandising (frequently), etc. Despite a great deal of inconsistency, the NRA tended increasingly after 1934 to reject code proposals in conflict with free competition.

According to Mr. Pearce, the first three classes above were aimed at destructive competition resulting from pressure of idle capacity, and the fourth at tactics considered "unfair" by some competitors. Most price cutting was taken care of by the first class, but, when its intent seemed to be to bankrupt smaller rivals, it was dealt with by declaration of "emergencies" or other applications of the fourth class. The analysis of competition, in chapter 1, into (1) prices and terms, (2) product differentiation and sales promotion, and (3) "economies," is interesting; but the third type becomes effective only through the first two. The author's purpose is to show how competition becomes destructive, and he stresses concealment of prices and terms.

Mr. Pearce does not evaluate results, but evidently supports the usual view of students that code rules were seldom successful. Nor does he make suggestions, save possibly in a last-page hint (through a double negative) that public agencies should restrict competition. What he does give is a careful, well reasoned account of the origins, aims and interrelations of the restrictive powers desired by business-men for their trade associations.

SIMON N. WHITNEY

POHLY, C. *Les exportations de la France et les nouveaux pays industriels*. Thèse présentée à la faculté des sci. écon. et soc. de l'Univ. de Genève pour l'obtention du grade de docteur ès sci. écon. (Geneva: Georg. 1939. Pp. 138.)

STOCKMAN, S. K. *Transithandeln vid import till Sverige med särskild hänsyn till år 1935: statistiska studier*. (Stockholm: Nordiska Bokhandeln i Distribution. 1938. Pp. 150, 271*. 15 kr.)

This volume is a thorough statistical study of the transit trade connected with imports into Sweden, with special reference to the year 1935. The study is limited to trade in which the Swedish importer bought the goods in a country other than the country of origin. The first part of the book con-

sists of 143 pages of textual material, with numerous tables interspersed. Following an analysis of the statistical material and an exposition of the problem of methodology, the topics dealt with are as follows: character of Swedish imports in 1935; the basis and character of transit trade in general; the rôle of transit trade in the Swedish import trade in 1935 (this trade represented 16.4 per cent of the total imports); the distribution of the most important commodities—coffee, mineral oils, wool, cotton and non-ferrous metals; the relative importance of the "transit countries" as regards Swedish imports—Great Britain, Germany, Denmark, United States, and The Netherlands. The second part contains 270 pages of illustrative and illuminating tables.

S. A. ANDERSON

WILLAN, T. S. *The English coasting trade, 1600-1750*. Tout memorial pub. fund. (Manchester: Manchester Univ. Press. 1938. Pp. xiv, 234. 12s. 6d.)

This painstaking study of the coasting trade is based upon the port books, already utilized by a number of students, though for different purposes. The importance of the coastwise trade in coal attracted Professor Nef's attention, but it was incidental to his purpose and much remained to be done. Dr. Willan has addressed himself to this task with energy and enthusiasm, but concentration on details has led to some loss of perspective. He has been quick to assume that nothing could be done to determine the relative importance of the coasting trade in the total trade of the Kingdom. He gives hitherto unpublished figures for coastwise tonnage of all ports except London for the years 1709, 1716, 1723, 1730, 1737, 1744, and 1751. There are totals for foreign tonnage. The omission of London, is of course, unfortunate, but there are general figures for 1701 and 1755 which would make it possible to supply some of the deficiencies. There are figures for the entrances of foreign and coastwise shipping at London in 1700 and 1750. For 1628, an enumeration of registered tonnage is available which lacks only four counties. (S. P. Dom. Car. I. vol. 155, no. 31.) The coastwise trade certainly accounted for more than half the total sea-borne trade of the Kingdom.

It is also clear that the coal trade was the largest single item in the coastwise trade, but the other minerals figured in some measure. Iron, lead, tin, and stone were important for specific areas. Agricultural products also moved about along several coasts, and some quantitative data are available. For manufactured goods no satisfactory quantitative material exists. We learn also about the crews of the coasters, their wages, and the hazards of impressment to man the naval vessels. Coasters were sometimes owned by masters who also acted as merchants, but as frequently the captains did not engage directly in trade. It is not possible to answer all the questions that one would wish; but Dr. Willan has given us the elements essential for understanding this transport system that seems remote to generations familiar with the steam railroad and the motor.

ABBOTT PAYSON USHER

Trade agreement between the United States and the United Kingdom. Vol. I. *Introduction: an analysis of the agreement*. (Washington: U. S. Tariff Commission. 1938. Pp. iv, 266.)

Accounting, Business Methods, Investments and the Exchanges

Consumer Market Data Handbook: 1939 Edition. By BEN P. HAYNES and GUERRY R. SMITH. Dom. commerce ser. no. 102. (Washington: Supt. Docs. 1939. Pp. xxi, 464. \$1.75.)

The most comprehensive and convenient tabulation of consumer market statistics yet assembled in a single source, this gives 82 statistical series for states and counties and between 50 and 70 series for all cities and towns with a 1930 population of over 2,500. More data are available for large cities than for small cities and towns. Definitions and descriptions of all data appear in the introduction.

The series were selected to show for each community or area (1) number of purchasing units, (2) volume and type of business and industry, (3) total income, and (4) division of the consumer retail dollar between kinds of stores.

Number of purchasing units is measured by 6 series relating to population, families, dwellings, and home ownership as of 1930. The growth of population since 1930 (estimated in 1937 to be nearly 7 million) is not evenly distributed, of course, and introduces error in comparing single communities and small geographic areas. Nine series for 1935 on retailing, wholesaling, manufacturing and number of farms are included to indicate volume and type of business and industry. Total income, the third objective, is measured by 13 series on employment and payrolls in 1935 as well as 22 series in a group entitled "Related Indicators of Consumer Purchasing Power." The latter group includes income tax returns by 5 size classes for 1934 and in total for 1935; passenger automobiles registered, 1936; residential telephones, 1935; domestic electric meters, 1930; magazine circulation, 1937; and similar information.

The division of the consumer retail dollar in 1935 is shown for 11 major classes of retail stores. For 10 of these classes there is provided a newly devised "Index of Place in Local Sales." This index is calculated by expressing sales of one class of stores as a percentage of total retail sales for the city or county and dividing this by a similarly computed percentage for the United States as a whole. This index varies widely, as might be expected from differences in market densities, in consumer buying habits and in the accuracy of retail sales figures for small areas.

It is well recognized that efficient marketing demands information on market conditions to supplement internal company records. Although full knowledge of any market requires data on buying habits and competition, measurements of market consuming power by small geographic areas can be very helpful in formulating marketing policies, in planning activities and in checking efficiency of operations. The authors of this handbook have

performed a real service in assembling in convenient form a variety of useful market statistics.

Effective application of such market statistics, however, requires seasoned judgment. Changes in economic conditions, failure of necessarily general series to parallel sales opportunities for specific products, assignment of proper weights when more than one series is used, lack of adequate sales data for correlation analysis, predominantly relative rather than absolute measurements and other similar difficulties plague the analyst. Furthermore, once the measurement is complete, careful allowance must be made for competitive activity, distribution coverage, retail trading areas, company marketing strategy and similar variables. Although these limitations are always present, experience shows that intelligent utilization of such measurements frequently will reveal opportunities for increasing marketing efficiency. In too many instances even the most elementary types of market measurement have not been undertaken.

ROSS M. CUNNINGHAM

Massachusetts Institute of Technology

The Contract Clause of the Constitution. By BENJAMIN FLETCHER WRIGHT, JR. (Cambridge: Harvard Univ. Press. 1938. Pp. xvii, 287. \$3.50.)

Seeing that *laissez-faire* economics has passed out, economic science becomes state action in control of individual action. The economic terms in the Constitution of the United States are contract, property, liberty. The legal terms are obligation and due process of law. Mr. Wright, by comprehensive investigation of the literature and decisions, covers all of these terms and writes a treatise on American politico-economics as interpreted by the Supreme Court. By writing upon the rise and decline of the contract clause he writes upon its submergence beneath the due process clause, which he dates clear-cut as of the year 1878.

The contract clause had a resurgence in the depression era of 1934, but the court, by taking account of adverse economic conditions, which in preceding depressions had not been allowed, strengthened yet further the predominance of the due process clause.

After extensive investigation of the Founding Fathers, Wright concludes that in framing the Constitution of 1787 they had in mind, by the clause against impairment by the states of the obligation of contracts, only contracts between private persons, and only that kind of impairment brought about by changing the monetary medium of debt-payments. The rise and expansion of the contract clause at the hands of the Supreme Court was in the expanded meanings of the word contract beyond this meaning as intended by the Framers of the Constitution. He proceeds in detail to examine

these expansions. They are not only the expansions made by Justice Marshall in the Dartmouth College case from private monetary contracts to contracts between the state and the incorporators and successors designated in a corporate charter, but also include land grants by the state legislature even though obtained by bribery, impairment by stay laws, by installment payments, by commodity payments, by setting up competitive corporations or municipally-owned competition where monopolies had been granted, by impairment of tax exemption clauses, and many other instances of impairment.

Popular, or "democratic," indignation against these enlargements of the contract clause were not based on economic grounds, but upon interference with states' rights. The same clause against impairment of contracts was inserted in the new constitutions of every state admitted before 1865, and Justice Taney's court, until 1864, was as strongly opposed, on economic grounds, to impairment of the obligations of contract as had been Marshall's court prior to 1835 (62ff). But it had been found, in many cases coming before the Supreme Court, that the contract clause was "inelastic." There was needed a "more flexible and inclusive concept," which was found in the due process clause after the adoption of the Fourteenth Amendment, and then applied to the Federal Congress under the Fifth Amendment. The first due process case, where that clause alone was the basis of the decision, was the Minnesota Rate Case, 1890 (100). In these cases property and liberty could not be taken by the state without due process of the law. Liberty became freedom of contract as well as personal liberty. Property became vested rights (243). Impairment of contract was merged into impairment of the value of property.

The extension of the contract clause to contracts between legislatures and private parties became inelastic because there were certain powers which the state may not contract away, especially eminent domain and the newly discovered police power (194ff). And the elasticity consisted, as the economist would say, in introducing distinctions of degree, where the contract clause had been interpreted as an absolute right of property. It was these questions of degree that required the Court "to demand that statutes, regardless of the provision upon which they are based, must accord with what appears to the Court to be reasonable." But "reasonableness is an elusive standard which obstinately refuses to be reduced to neat and workable rules" (119). However, Wright suggests certain "tentative conclusions" as to its meaning based upon "economic conditions" which may create an emergency, as in the Minnesota Moratorium case of 1934 (118, 119).

From the economist's standpoint there is needed a further treatise by Wright on the rise and extension of the due process clause and its doctrine of reasonableness, parallel to this outstanding treatise on the contract clause.

JOHN R. COMMONS

University of Wisconsin

NEW BOOKS

BLOOMFIELD, D., editor. *Chain stores and legislation*. (New York: Wilson. 1939. Pp. 475. \$1.25.)

CHERNE, L. M., and others. *Adjusting your business to the new legislation*. (New York: Tax Research Inst. of America. 1939. Pp. 1065, loose-leaf. \$12.85.)

CLARK, J. M. *Social control of business*. 2nd ed. (New York: McGraw-Hill. 1939. Pp. xvi, 537. \$4, school ed.; \$5, trade ed.)

GILMAN, S. *Accounting concepts of profit*. (New York: Ronald. 1939. Pp. xv, 653. \$5.)

GORDON, L. J. *Economics for consumers*. (Cincinnati: Am. Book Co. 1939. Pp. x, 638.)

The problems of consumers are at least threefold. It is clear, from the first section of this book, that the author recognizes this. First, certain wants being given, how make the best combinations and the best buys in the existing situation, particularly on the existing market. Second, how might prices be lower and qualities higher if production and marketing practices were more efficient and controls more effective. Third, what determines initial choice-making and what influences, market and other, play upon consumers or guide them in their selections.

The first problem, planning and making the best buys on the existing market, is the easiest to handle. In connection with it the author discusses fraud, advertising, price appeal, installment buying, standardization, and gives advice in buying insurance and shelter, in making investments and in budgeting in general. Something over a third of the book falls within this category. But it is not his main purpose, the author says, to present "factual information and rules of buying procedure."

Under the second problem, there are many issues as to improved quality and lower prices under a production and marketing system more efficient or more effectively controlled. Here would come such matters as imperfect competition, monopoly and the relation of government to it, effects of advertising on price and quality, consumers' coöperation and economic planning by the government. Monopoly as such receives little attention, though price-fixing laws, which the author recognizes as undesirable, are discussed in a chapter called "Government aids: positive." Much more might have been said about the part played by pressure groups, industrial and agricultural, in obscuring consumers' interests. Effects of the tariff are mentioned, but the implication is incorrect that tariffs raise prices to consumers by the full amount of the rates. There is a good brief discussion of the effect of advertising on large-scale economies. "Coöperation alone makes consumer control a reality," says the author, and he gives 50 pages to the perennially hopeful movement of consumers' coöperation. Also he recommends centralized government supervision and control through federal, state and municipal consumer departments. It would have been well for him to indicate that not all economists believe such centralization the best way for the government to meet consumers' needs.

What appears to the reviewer the greatest omission of the book occurs in connection with the third and in many ways the most difficult problem, the choice-making process. The author has little to say about purchasing power as a factor in choice, and devotes small attention to either income or prices in their function of determinants of demand. He does, however, ade-

quately recognize the importance of custom and emulation. He discusses producers' actions in directing and creating wants for their own profit and he takes up the authoritarian control of choice. In his discussion of wants the author is confining his attention directly to the American scene. Wants are, of course, very largely cultural products and so can be finally understood only in relation to the philosophy of peoples and their integrated standards of living.

The questions for discussion and problems at the end of each chapter do a good job in relating the subject matter of the book to the student's own interests and experience.

ELIZABETH E. HOYT

HARDY, C. O. *Odd-lot trading on the New York Stock Exchange*. (Washington: Brookings Inst. 1939. Pp. x, 192. \$1.50.)

This study was undertaken by the Brookings Institution at the suggestion of the three principal odd-lot dealers of the New York Stock Exchange, and without question constitutes the clearest explanation of odd-lot trading as yet published. The author's treatment is technical and detailed and assumes that his readers are already acquainted with ordinary stock-market procedure.

Briefly the book sets out to explain how odd-lot orders are executed. It describes the lagging effect on the demand and supply of less than 100-share orders to buy and sell; it analyzes the problems that beset odd-lot dealers (largely problems of cost, service, and competition), and finally it offers an appraisal of alternative proposals for handling this type of orders.

In general the author is of the opinion that the public will be served best by a continuation of the present system: *i.e.*, a situation in which a few dealers monopolize the business as a whole but compete stiffly with each other.

WILFORD J. EITEMAN

HEIMANN, H. H. *America's balance sheet*. (New York: Nat. Assoc. of Credit Men. 1939. Pp. 355.)

HOLLERAN, O. C. *Basic industrial markets in the United States: paint, varnish, and lacquer industry*. Market res. ser. no. 14.5. (Washington: U. S. Dept. of Commerce, Marketing Res. Div. 1939. Pp. 31. 10c.)

ISAKOF, J. F. *The Public Works Administration*. (Urbana: Univ. of Illinois Press. 1938. Pp. 166. \$2.)

The author of this study is careful to warn us in his preface and elsewhere that his approach to the subject is from the governmental and administrative angle rather than from the economic. Yet, as a demonstration that there are really no water-tight compartments in the social sciences, there is much here of interest to the economist and particularly to specialists in that hybrid form which we call "public finance." Earlier chapters describe the development and permutations of the P.W.A.; and at several points before the end the writer betrays his hope that, even though this organization itself will have its day and pass away, there may be some residuum of experience and some permanent planning and administrative agency, perhaps through the present National Resources Committee, which will unify the construction activities of the national government during both normal and depression periods.

Other topics discussed with much keenness and patience are: the personnel policies of the P.W.A. which Mr. Isakoff finds not too bad in spite of the exemption from civil service requirements; the question of whether the tail has not sometimes wagged the dog when the large discretion as to projects given to the administrator and his subordinates has committed or tended to commit Congress to undertakings which that body would not have approved directly; the rules followed in granting aid to non-federal projects and the danger of putting a premium upon improvidence and impecuniosity on the part of local governments; the care taken regarding legal matters and the rather anomalous situation where this federal agency has been found lobbying for enabling legislation from state bodies; the methods of letting contracts and the policies as to selecting labor from local relief rolls, wages to be paid, materials to be bought, etc.; and the matter of payments to localities in lieu of taxes lost through government housing projects.

In estimating the net effect of the P.W.A. on employment, allowing for "primary indirect" and "secondary indirect" as well as direct or "on-site" demand, the writer concludes that "it has not been demonstrated that the actual expenditures by the P.W.A. (less than \$3,000,000,000 over a period of four and one-half years) were large enough to justify the expectation that they would counteract the forces of business depression in any marked degree" (p. 144). In fact, its inability to dramatize its employment-creating possibilities has been an important factor in the somewhat niggardly allocation of funds to this agency as compared with some others.

The vividness of the description and analysis in the book might have been increased if, without violating scientific accuracy and frigidity, other personalities besides that of Mr. Ickes could have been referred to, and if there had been more citation of concrete cases and decisions.

WARREN B. CATLIN

JERRETT, H. D. *The theory of real property valuation*. (Sacramento: Author, 2941 Highland Ave. 1938. Pp. 335. \$5.)

KANZER, E. M. and GERSTENBERG, C. W. *Essentials of business law*. Rev. ed. (New York: Prentice-Hall. 1939. Pp. 543. \$1.60.)

KEMP, H. R., editor. *Canadian marketing problems: ten essays*. (Chicago: Univ. of Chicago Press. Toronto: Univ. of Toronto Press. 1939. Pp. vii, 152. \$2.50.)

KOHLER, E. L. *Solutions for advanced accounting problems*. (New York: Prentice-Hall. 1939. Pp. 443, loose-leaf. \$4.)

MCCARTHY, J. E. *The physical assets of the State of Indiana and the earnings and distribution of income of Indiana corporations, 1936*. Reprinted from *Report of the Indiana Tax Study Commission*. (Notre Dame: Univ. of Notre Dame. 1939. Pp. 115.)

McNAIR, M. P. *Operating results of department and specialty stores in 1938*. Bull. no. 109. (Boston: Harvard Univ. Bur. of Business Research. 1939. Pp. vi, 30. \$2.50.)

MACNEAL, K. *Truth in accounting*. (Philadelphia: Univ. of Pennsylvania Press. 1939. Pp. xvii, 334. \$3.50.)

MAYNARD, H. H., WEDLER, W. C. and BECKMAN, T. N. *Principles of marketing*. 3rd ed. (New York: Ronald. 1939. Pp. xxi, 700. \$4.50.)

This is the third edition of a fine book by the marketing trio of Ohio State University. The original version was published in 1927, and five years

later it was revised.¹ The reason for another edition is the familiar one: "Marketing does march on" (p. v), and important changes have taken place in the field. Recent legislation and factual data are necessary to provide the student with "a forward-looking and fully up-to-date textbook"—an obvious essential.

The authors have fulfilled the reader's expectations. The revision contains considerable new information that has been gathered by the three Censuses of Business and other research agencies. It has been brought down to date by incorporating significant legislation of the past decade. Further, the text has been improved by a number of pedagogical devices that will aid the instructor in the presentation of the material. The functional approach has been maintained, in the main, but consideration is given to marketing institutions and the marketing of a selected number of commodities. Historical material and cost data are presented as opportunity permits, so as to weave "a pattern that reflects realistically our marketing system, with its functioning or life standing out in bold relief" (p. 17).

Three new chapters strike the eye. Deserving a red star is the chapter on supermarkets, retail institutions offering "a relatively large and complete stock" of food products and having as their principal appeals "price, mass display, wide assortments, and convenient parking" (pp. 172-173). Following the lead of Copeland, Hoyt,² Phillips,³ Vaile and others, the authors have added a chapter on the consumer in our marketing system. The final chapter treats of the relation of the government to marketing.

The text has merit. The writers are to be commended for laying greater emphasis on the principles of marketing and less on the purely descriptive and informative. They have maintained a satisfactory social point of view. The book fairly bristles with illustrative graphs and tables that will appeal strongly to devotees of blackboard and chalk.

J. S. ROBINSON

MERIAM, L. *Public personnel problems from the standpoint of the operating officer*. (Washington: Brookings Inst. 1938. Pp. xii, 440. \$3.)

Economists would do well to read Meriam's new 14-chapter volume on public personnel, because it is distinct in its approach for three reasons: (1) It is non-technical, in no sense a textbook to replace Mosher and Kingsley's *Public Personnel Administration*; instead it is general, readable, studded with "cases." (2) It is written from the standpoint not of the central Civil Service Commission but of the "operating officer" in the line agencies. (3) It is a down-to-earth discussion of federal personnel administration by a former practitioner in the federal government.

The usual phases of personnel administration are given a chapter each, the best of which are the chapters on "Morale and discipline" and "Retirement." Also commendatory are the author's proposals for educational leave and for limitation of the personnel officer's rôle to that of staff adviser and consultant.

There are two schools of thought among students of public personnel on the question of the establishment of an "administrative corps" in the public service. In Meriam's new book there are indirect references to the

¹ Reviewed in *Am. Econ. Rev.*, June, 1928, pp. 303-305, and Sept., 1932, p. 506.

² Reviewed in Sept., 1929, pp. 513-515.

³ Reviewed in March, 1939, pp. 152-153.

writings of the opposing school of thought, which espouses the establishment of an administrative corps of some 2,000 members in the federal government and believes that there ought to be careers in the federal service for such people. Meriam recognizes the need for more administrative leadership in Washington agencies but doubts that the "general administrator" would supply the deficiency.

From a few of Meriam's conclusions the reviewer must dissent, the most important of which is his objection to the one-man administrator plan, which has worked so well in Maryland and which has been proposed by the President's Committee on Administrative Management for adoption in the federal government. As a former staff member of the central personnel agency at Washington, the reviewer is prepared to hold that the one thing most definitely needed in that agency is concentration of administrative authority. The individual members of the Civil Service Commission since 1933 stand high in ability and integrity. However, the board-type organization is unsuited to prompt and progressive action or administrative leadership. No matter how capable the three commissioners are individually, they cannot be efficient collectively. Meriam makes out a good case for the board-type organization (for there is a case, occasionally), but the argument does not fit the Civil Service Commission. The point that its duties are judicial (pp. 353-355) is specious and overlooks the fact that almost all of its most important duties are distinctly administrative. There is scarcely more reason for a board-type organization for the civil service agency than for the Department of Agriculture, the Public Works Administration, the Bureau of Labor Statistics, or the Public Health Service.

The volume is generally pertinent for three reasons: (1) It is timely, in that it will be useful to the departmental personnel directors who assume their duties this spring as a result of the President's executive order of June 24, 1938, which requires the establishment of divisions of personnel supervision and management. (2) It is the first comprehensive discussion "from the standpoint of the operating officer." (3) It presents the "other side" of a good many questions. Although the reviewer is not in accord with Meriam's main conclusion regarding organization for public personnel, it is certainly well, in the interest of fair and clear thinking, to have both sides presented. With these reservations, a perusal of the book may be recommended.

LEWIS B. SIMS

MILLER, H. S. *Price control in fascist Italy*. (New York: Columbia Univ. 1938. Pp. 146. \$2.)

This study outlines the aims, methods, extent and success of price fixing in Italy, which was seriously begun only in 1935. The announced purposes, while not clear-cut and consistent, include protection of both consumer and producer (the latter being willing to trade his freedom for insurance against price cutting), reduction of export costs, and exclusion of imports. Prices are set at Rome and modified for local conditions by government-employer-employee committees. The principle of representative firm cost is frequently used, but the cost analysis is often inadequate, and long periods of rigid prices are noticed. Only a few luxuries, and unpredictable items like vegetables, are free from retail and wholesale price control.

Although there is little evidence on violations, the author believes the maximum price lists—which are posted in all shops—are probably well enforced. The index numbers of wages and prices are so poor that not much is known as to economic effects, but a slow, steady price rise seems to have occurred, overtaken sporadically by wage boosts. Thus real wages, kept from rising by the high prices of bread, sugar, etc., due to the self-sufficiency campaign, have at least fallen little, if at all.

SIMON N. WHITNEY

NEWLOVE, G. H., and others. *Intermediate accounting*. (Boston: Heath. 1939. Pp. 848. \$4.50.)

PALUMBO, P. *Ragioneria ed economia corporativa*. (Palermo: F. Ciuni. 1939. Pp. 29. L. 3.)

PEARCE, C. A. *NRA trade practice programs*. (New York: Columbia Univ. Press. 1939. Pp. 234. \$2.75.)

PERAZICH, G., SCHIMMEL, H. and ROSENBERG, B. *Industrial instruments and changing technology*. Rep. no. M-1. (Philadelphia: WPA. 1938. Pp. xi, 148.)

"These industrial instruments increase the productivity of labor in industry by permitting changes in processes, by increasing the productive capacity of installed machinery, by reducing fuel consumption, spoilage of materials, or machinery stoppages, or by providing records on the basis of which management may improve the utilization of its labor force and the flow of work in process."

PHELPS, C. W. *Retail credit fundamentals: official textbook of the National Retail Credit Association*. (St. Louis: Nat. Retail Credit Assoc. 1938. Pp. xiii, 318.)

With the aim of treating "only those basic functions which every employee in the credit department should be expected to know . . ." this book is one project in the educational program of the National Retail Credit Association. A second volume is planned to cover more advanced problems. The presentation, which includes much descriptive material of optional methods of operation, is logically enough organized into three parts: (1) securing business, (2) controlling the account, and (3) collecting, *i.e.*, it follows through the normal credit cycle.

The basic theme is not "credits" or "collections" but rather the "management of credit sales." A nice balance of emphasis is maintained between credit as a sales tool and the need to "educate the customer to pay promptly." Effective use of the credit department in reviving inactive accounts, in directing store attention to "one-department" customers, and in generally facilitating store service is given well deserved attention.

Though containing little that is startlingly new, this volume should be useful to the experienced credit sales manager as a review of his own practices and to the less advanced employee as an introduction to the credit problem and its relation to the store as a whole, and a better understanding of the "why" of activities in which he participates.

GERALD B. TALLMAN

PORTER, S. F. *How to make money in government bonds*. (New York: Harper. 1939. Pp. xiv, 238. \$3.)

Written in popular style, this book discusses with a fair degree of completeness an increasingly important segment of our securities market. The first five chapters deal with the creation of the government bond market, definitions, trading methods, and free riding. This part of the book might be criticized as over-emphasizing the trading possibilities in government bonds. "Free riding," discussed at some length in the text, ordinarily implies the purchasing of commodities or securities, a subsequent sale and profit, without the use of any cash on the part of the purchaser. In the strict sense of the word, free riding is impossible in connection with new government issues. The Treasury Department, to be sure, has consistently offered to the public new issues at a price differential lower than that at which comparable outstanding issues have been selling in order to assure successful sale of such issues. This profit is ordinarily regarded as similar to the underwriting profit allowed by corporations in connection with the sale of their issues. No subscription to government bonds, however, is taken without a cash deposit; and full cash payment must be made for the total amount of allotments prior to the delivery of such bonds, which is quite different from the typical free-riding operation in corporate securities, where no cash is required until delivery is made.

Chapters dealing with factors governing movements of United States securities, the relation of excess reserves to the government bond market and interest rates, and the effect of gold movements on the government markets are well written and contain material of interest, not only to the lay reader, but to the technical investor.

Chapters dealing with the government's borrowing requirements, control of the government market, technical description of government debt, and an analysis of the control exercised over the government market are likewise worthy of careful reading.

In the appendix are contained data dealing with the Treasury financing, bank investments, and bank excess reserves, as well as the listing of historical events since 1929 that were of importance in the movements of government bond prices. The bibliography is too sketchy to be of value.

Portions of the book could be used for reference purposes in courses on investments. Its greatest appeal, however, will be to investment counsellors and to individuals charged with handling funds invested partially or wholly in public securities.

R. E. BADGER

PUGH, B. H. *A better way to make money: stock and grain market investing*. (New York: Ronald. 1939. Pp. 314. \$3.50.)

RATCLIFF, R. U. *The problem of retail site selection*. Michigan bus. stud. vol. ix, no. 1. (Ann Arbor: Univ. of Michigan. 1939. Pp. 93. \$1.)

RAUTENSTRAUCH, W. *The economics of business enterprise*. (New York: Wiley. 1939. Pp. xiv, 445. \$4.)

SALIERS, E. A. *Depreciation: principles and applications*. 3rd ed. (New York: Ronald. 1939. Pp. xi, 482. \$5.)

Professor Saliers' *Principles of Depreciation* was published in 1915; it was revised in 1922 under the title, *Depreciation: Principles and Applications*; and this third edition is a revision of the 1922 volume. Moreover, as

great progress has been made toward better understanding of both the physical and financial aspects of depreciation between 1922 and 1939, so has the revision of the present volume been thorough and complete. The physical volume itself has been reduced from 590 to 482 pages, with a rearrangement of the chapters and the pertinent subject-matter. This does not begin, however, to tell the story of the relatively complete revision of the textual material.

The present volume, in the opinion of the reviewer, is a tribute to the scholarship of the author. The chapters are well organized, the material clearly presented, and the phases of depreciation which cause greatest concern today to the managers of industrial and commercial businesses are carefully considered. Among these may be mentioned depreciation in relation to the accurate determination of operating costs, current depreciation and the income statement, relation of depreciation to working capital, United States Treasury policy and Court interpretations as regards depreciation, depreciation in both the United States and Great Britain in the computation of income taxes, and various other equally important matters. Where it is necessary to do so the author clearly and fearlessly presents his own beliefs and points of view. Depreciation will obviously continue to have its controversial points, and no reader will agree entirely with the author; nevertheless Professor Saliers in this new edition of his book has added materially to our knowledge and has stimulated our thinking on the subject.

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- Commodity year book, 1939*. (New York: Commodity Research Bur. 1939. Pp. 608. \$7.50.)
- Developments in company vacation plans*. Stud. in personnel policy no. 13. (New York: Nat. Industrial Conf. Board. 1939. Pp. 23.)
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Commerce, House, on H. R. 3395, to promote business and economic research in the United States by establishing and maintaining, in connection with state university schools of business administration, research stations to co-operate with the Department of Commerce, April 3 1939. (Washington: Supt. Docs. 1939. Pp. 101. 15c.)

Investment trusts and investment companies: report of the Securities and Exchange Commission pursuant to Section 30 of the Public Utility Holding Company act of 1935. Part 1. The nature, classification, and origins of investment trusts and investment companies. (Washington: Securities and Exchange Commission. 1939. Pp. viii, 158.)

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Selected information on department stores with annual sales over \$10,000,000 each registered under the Securities Exchange act of 1934 at June 30, 1938. Selected information on manufacturers of office machinery and equipment registered under the Securities Exchange act of 1934 at June 30, 1938. (New York: Securities and Exchange Commission. 1939. Pp. 85; 57.)

Capital and Capitalistic Organization

The English Business Company after the Bubble Act, 1720-1800. By ARMAND BUDINGTON DUBOIS. Pubs. of the Foundation for Research in Legal Hist., Columbia Univ. School of Law. (New York: Commonwealth Fund. 1938. Pp. xxii, 522. \$5.00.)

This book is primarily a contribution to legal history but it is also of value to economic history and to business history. It deals with incorporated and unincorporated joint-stock companies during the eighty years following the South Sea Bubble. It carries on the story told by W. R. Scott in his three-volume history, though it does not give so much of the economic background.

The findings of the author may be briefly summarized. The Act of 1720 was effective in checking the formation of corporations. In the period 1740-70, however, the unincorporated company became an accepted substitute by the adoption of various devices, including the use of trustees to hold property. During the period 1770-1800 there were few corporations; but this fact did not hold back the Industrial Revolution, because of the ease and success in forming unincorporated companies which possessed so many of the efficient attributes of the corporation. The unincorporated company even claimed limited liability, though the courts would not allow this claim.

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The author indicates that the officials were not active in prosecuting offenders under the Act. This was not necessary, in fact, because most of the work was done not in Parliament and not in the courts but in the lawyers' offices. The emphasis on the legal counsels of the companies rather than on the courts is one of the chief contributions of the book. There may have been a retardation in the growth of corporate law, especially on the side of broad generalization, but there was no great retardation in flow of capital into industry and transportation during the period.

The new and distinctive source used in this book is the business record. The author has been diligent in examining the records of such concerns as the East India Company, South Sea Company, Hudson's Bay Company, Royal African Company, Bank of England, Boulton and Watt, Warmley Copper Company, and the Principio Iron Works of Maryland. He has reproduced many facts to be found in footnotes.

It is at first astonishing to discover that 65 per cent of this book is devoted to footnotes, bibliographies, and indexes, and only 35 per cent to narrative and exposition. Of the 35 per cent many pages are made up of conclusions, scattered and final. This arrangement is really justified and to the scholar it is helpful.

The weakness of the author is in a lack of familiarity with the period before 1720, especially the rich experience of business-men with partnership in England and, even more, on the Continent. The strength lies in the emphasis on the participation of the lawyer outside of the courts in solving the many problems of companies, incorporated and unincorporated. In the nineteenth century various other groups of business auxiliaries were to arise to rival the lawyer in advising business, notably the public accountant and the consulting engineer, and, somewhat later, consultants in office management, marketing, and industrial and public relations. It is an interesting fact that in the period of formation and consolidation (1100-1720) business as such did not use lawyers; in fact, business-men purposely avoided them. The need for the joint-stock company (mind you, *not* the corporation) gave the lawyer his opportunity in England. To be sure, if the corporation had developed without the insane opposition to it exemplified by the Act of 1720, the lawyer would have been required to interpret any developing business law. How the lawyer actually played his part is an interesting story. All students of corporation law and corporation management will find much of value in this book.

N. S. B. GRAS

Harvard University

NEW BOOKS

BAUER, J. and GOLD, N. *The electric power industry: development, organization, and public policies.* (New York: Harper. 1939. Pp. xii, 347. \$3.50.)

HAUSSMANN, F. *Konzerne und Kartelle im Zeichen der "Wirtschaftslenkung."* (Zürich: Recht und Gesellschaft. 1938. Pp. 371. 23 fr. suisses.)

This book is the first of two legal-economic studies intended to deal with the place of cartels and combinations in the age of economic planning or, better said, "steered economy." The countries included are the United States, Germany, France, England, Italy, Switzerland, Japan and (strange to say) Soviet Russia. The first volume is mainly descriptive. The second, as yet unpublished, is to be a critical study of the significance of the combination movement under present-day economic conditions.

Much of the work contained in this volume has already been done for some of the countries but the author makes an attempt to view the growth of cartels and combines and their regulation and use by the State from a more international standpoint. Dr. Haussmann is thus at his best when he compares the situation in the various countries. He seems to believe that the most far-reaching changes in the relations between government and organized business have taken place in the United States and Germany; while in England and France, for fundamental reasons, they have been least radical. Switzerland has found a "middle way" (for which the United States is groping) and in Japan and Italy the most important changes took place before 1930, which is roughly the date used by the author to divide the pre-depression from the post-depression period.

A more complete explanation of what the author means by *Wirtschaftslenkung* would seem necessary, since it occupies such an important place in the book. Furthermore, how "capitalistic" are the cartels and combines nowadays in those countries where they are being used by the governments for their own purposes?

A valuable bibliography and a collection of source materials (NRA codes, speeches of leading men, combine set-ups, etc.) are included at the end of the book. A book like this should do its bit to fill in the wide gap between law and economics.

WILLIAM CONRAD KESSLER

KROUT, J. A., editor. *Monopoly and competition in industry and labor*. Proc., vol. 18, no. 2. (New York: Acad. of Pol. Sci. 1939. Pp. 147. \$2.50.)

LAVERGNE, B. *Essor et décadence du capitalisme*. (Paris: Payot. 1938. Pp. 251. 25 fr.)

Professor Lavergne traces the general trend followed by capitalism from its origin to the present. He examines closely the reason for its apogee in the nineteenth century when its fecundity revolutionized history, and he investigates critically the influences which have altered the system in the twentieth century. The false criticisms placed against the present economic order are strongly attacked; yet he brings forth what he considers the true criticisms, most of which are external and not part of the system.

The study leads the author to a conclusion similar, in essence, to that presented by Dr. H. G. Moulton in his Brookings Institution report—namely, that *the trouble with capitalism is the capitalist*. As Mr. Lavergne has it—capitalism without capitalists could survive.

While Dr. Moulton did not attempt to discuss the precise steps that should be taken to remove the influences retarding or hampering the system, Mr. Lavergne does—the solution being *coöperative management*. Such a regime,

interested in getting goods at a price as close as possible to cost, would not contain the exacerbating desire for large profits, one of the flaws inherent in capitalism. For this reason, the presence of coöperatives would prevent monopolies from obtaining monopoly advantages, the other flaw in capitalism as now functioning. In the author's mind, the coöperative is the one economic institution that will permit and maintain the economic equilibrium so essential to the capitalistic order. Under such a régime, capitalism can survive; otherwise, it will decay and cease to exist.

H. L. McCracken

SCHAFFNER, H. *Die öffentliche Unternehmung in England*. (Köln: Kurt Schroeder Verlag. 1938. Pp. 126. RM. 3.60.)

This is a thesis on the various forms of British public enterprise. The subject is divided into the description (and unfortunately little more than the description) of the three kinds of public enterprise whose definition has been introduced into German literature by Professor H. Ritschl: (a) undertakings, publicly owned and operated by a government department—e.g., the British Post Office; (b) undertakings, publicly owned but operated by a non-governmental body on private-capitalistic lines—e.g., the Port of London Authority, the British Broadcasting Corporation, the Central Electricity Board (the authority operating the celebrated "grid" system) and, most important, the London Passenger Transport Board (operating the entire passenger transport of Greater London); and (c), private enterprises which are, in their price, capital, dividend, etc., policies so thoroughly regulated by the government as to be practically public undertakings—e.g., the four great English railroad companies and the British coal mines. The author confines himself to a purely descriptive treatment of these highly interesting organizations, their legislative bases and especially the relations to their employees, if we disregard the few indications of his own opinion that seems to favor the nationalization of all public utilities.

HERBERT K. ZASSENHAUS

Rates, taxes, and consumer savings, publicly and privately owned electric utilities, 1935-1937. (Washington: Federal Power Commission. 1939. Pp. 57. 15c.)

Labor and Labor Organizations

Le Chômage en France de 1930 à 1936. By GABRIELLE LETELLIER, JEAN PERRET, H. E. ZUBER, A. DAUPHIN-MEUNIER. *Enquête sur le chômage*, Tome I. (Paris: Recueil Sirey. 1938. Pp. 330. 75 fr.)

It is natural that a nation which for the first time, in the life of a generation, suffers profound dislocation in its labor market should have little experience in observation and measurement of unemployment. Progress in unemployment statistics is made at such a tremendous price that France may be envied and congratulated for having had to give little thought to these problems. The *Investigation of Unemployment* of the Scientific Institute for Economic and Social Research, Paris, is for France a pioneering work. When completed it will consist of three volumes: The first—re-

viewed in the present note—surveys unemployment in France from 1930 to 1936; the second promises an analysis of individual unemployment cases in representative regions, and the third will deal with the budgets of families whose breadwinners are unemployed. The statistical basis of the project is rather modest: The general survey of unemployment rests essentially upon relief statistics and reports of employment offices, both sources being hardly more representative in France than in other countries. In the second part about 35,000 individual cases will be scrutinized, and the budget analysis will summarize the experience of 250 families.

The following observations refer to the first volume which includes three sections: the character and development of unemployment in France; unemployment in three selected areas; the struggle against unemployment.

The first section offers less than the title promises. A cursory analysis of relief statistics with the inevitable distribution of individuals by sex, age, occupations and geographic regions can hardly be accepted as an analysis of the character and development of the unemployment crisis in France. The short second section contains details of strictly local interest. Of the greatest interest for the foreign readers is the third section, which is entirely based on first-hand information unknown abroad, and gives an unbiased and clear picture of relief policy and the early experience of the unemployment compensation system in France.

What the authors think concerning the origin of the depression in France is briefly summarized as follows: "(1) Beyond any doubt, the depression was originally launched and two years later aggravated in France by international monetary events which could not be affected by the national economic policy. . . . The underlying causes of the depression should be sought not in specific conditions of the French economy but in conditions characteristic of the world economy and particularly . . . of British and American economies." (2) It has been shown that France is facing "a derived depression resulting from a more general depression launched abroad. Consequently France cannot solve this depression exclusively by means at her disposal. All she can do is to adjust her economy to that of the world, to avoid anything which would make this adjustment more difficult, and to remain attached to the great economies whose recovery and stagnation are almost immediately reflected by recovery and stagnation in our own economy."

To be sure, the formula, "to adjust the national economy to that of the world," may mean anything from a do-nothing policy to rigid planning. But the purpose of the quoted statements seems to be to provide the government with a general alibi, rather than to emphasize its responsibility for what has happened in the national labor market. If these statements fail to explain the origin of unemployment in France, at least they reflect fairly

well the economic philosophy of those who have been in control of public affairs in France during the depression. Yet this philosophy appears only in the introductory chapter of the volume and does not affect its descriptive part.

W. S. WOYTINSKY

Washington, D.C.

NEW BOOKS

BLOSS, E. *Labor legislation in Czechoslovakia, with special reference to the standards of the International Labor Organization.* (New York: Columbia Univ. Press. 1938. Pp. 210. \$3.)

Dr. Bloss has attempted three tasks in her study of Czechoslovakian labor legislation. First, she has presented briefly the background of the present Czechoslovakian labor laws in the legislation of the old Austro-Hungarian Empire. Second, she has presented, in some detail, what labor legislation has been enacted since the founding of the Republic. Last, she has compared these laws with the Conventions which the International Labour Organisation has proposed to its member states.

The result is a detailed and informative book, but one which attempts practically no interpretation or analysis. The book would undoubtedly have gained had the author focused her interest on the effects of the Czech labor legislation on the workers' standard of living.

It is interesting to note that Czechoslovakia has adopted about the same number of international labor Conventions as have the other small European states. Of the 63 Conventions, Czechoslovakia has adopted 13 against Sweden's 10, Belgium's 20, Hungary's 15, Yugoslavia's 14. The major Conventions not accepted are those relating to the employment of women before and after childbirth, night work for minors, and workmen's compensation. The important Conventions concerning the eight-hour day and sickness insurance have been adopted.

It is unfortunate that, in her detailed examination of labor legislation, Dr. Bloss has scarcely touched on the intricate minimum wage-fixing machinery for homeworkers who in 1937, it has been estimated, numbered about 200,000.

Since the partition of Czech territory in November, 1938, the government has attempted to retain the labor standards within its frontiers.

SIDNEY C. SUFRIN

DONALDSON, M. H. *Labor problems in the United States.* (New York: Longmans Green. 1939. Pp. x, 289. \$1.)

This is one of a series of relatively small volumes issued under the general title of American Business Fundamentals. Included in the discussion are wages; hours and conditions of labor; collective bargaining; security of employment; the labor movement; employers' associations; the relation of government and the courts to the problems of labor relations; scientific management and personnel management; women and children in industry; prison, casual, immigrant and negro labor.

Complete analysis of so wide a range of subject-matter is, of course, not

possible within the limits of this book, but the author has done a very creditable job in the space at his disposal. The organization and arrangement could have been more logical; in its present form, the book is little more than a series of chapters without reference to any clearly defined pattern. The treatment throughout is elementary but clear and interesting, supported by recent statistical data and careful documentation. There is a short general list of references for further reading, and questions and problems on the subject-matter of each chapter.

GORDON S. WATKINS

DOWELL, E. F. *A history of criminal syndicalism legislation in the United States*. Stud. in hist. and pol. sci., ser. lvii, no. 1. (Baltimore: Johns Hopkins Press. 1939. Pp. 176. \$1.50.)

GANNETT, F. E. and CATHERWOOD, B. F., editors. *Industrial and labour relations in Great Britain: a symposium*. (New York: America's Future, Inc. 1939. Pp. 378. \$2.50.)

GRIFFIN, J. I. *Strikes: a study in quantitative economics*. (New York: Columbia Univ. Press. 1939. Pp. 319. \$4.)

HARRIS, H. *American labor*. (New Haven: Yale Univ. Press. 1939. Pp. vi, 459. \$3.75.)

This is among the more readable of the numerous recent attempts to popularize the story of the development of labor organization in the United States. To the student already familiar with the main threads of that story it could hardly be expected to offer much that is novel. The author is a well known journalist who writes with a verve that makes the book easy reading in spite of its rather awkward structure.

The first two chapters (p. 1-95) present a general review of the organized labor movement down through the formation of the A. F. of L. There follow seven chapters dealing with trade unions in individual industries; the freshest of these are concerned with the American Newspaper Guild (pp. 173-91), the United Automobile Workers (pp. 267-304), and the Textile Workers' Organizing Committee (pp. 305-49). The final chapter deserves its name of "Conclusion" only because it is placed at the end. The economist interested in the analysis of the operation of collective bargaining will have to carry his well worn pocket periscope and read behind as well as between the lines to find real "conclusions." If he does so, however, his search may not be entirely fruitless, as at some points the book exhibits almost brilliant flashes of understanding of economic factors conditioning collective bargaining.

The "Conclusion" as written really covers a miscellany of topics including the Brotherhood of Sleeping Car Porters, The National Industrial Recovery act, and the Social Security act. However, it is much more coherent than this characterization suggests, for the "Conclusion" is in reality a history of the evolution of A. F. of L. policy since 1900. This is the thread which introduces unity into such an apparent diversity of subjects.

C. L. CHRISTENSON

KELLER, M. *Decasualization of longshore work in San Francisco: methods and results of the control of dispatching and hours worked, 1935-37*. Rep. no. L-2. (Philadelphia: WPA, Nat. Research Project. 1939. Pp. xx, 157.)

KUCZYNSKI, J. *Hunger and work: statistical studies*. (New York: International Pubs. 1938. Pp. xii, 132. \$1.50.)

In the foreword to this statistical tract which seeks to substantiate the Marxist dogma that "the rich are becoming richer and the poor poorer," a British trade-union official, Mr. R. Coppock, says:

"But here is no calm dissertation on the wrongs of mankind; no abstract philosophising on evil; here are hard facts showing that food is short; that housing is bad; . . ."

Mr. Kuczynski, in his preface, claims that he is not feeding statistics to the underfed to inform them that they are underfed. He tells "workers only" in which industries they are worst off. Chapter 3 is the statistical backbone which lays the groundwork for gloomy generalizations in the fourth and final chapter, titled "Seven lean years" (1931-1937). He concludes:

"Seven lean years? Yes! Or rather seven leaner and leaner years! And the next seven? Many economists, and among them the best (oh modesty!) predict a new crisis in the near future. The next seven years will not be lean; they will be hell, or under pressure of mass action in a Popular Front, they will bring progress—at last!"

Using Mr. Seeböhm Rowntree's pecuniary norms as to the wages necessary for physical efficiency for three categories of workers, the author shows how these categories of English workers fared in various industries during the "lean" years. Mr. Kuczynski's constant lament is that the Rowntree standard is inadequate. Government statistics are paraded to show in industry after industry that large numbers of adult male and female workers (*c.* 6,000,000) do not earn "even what Mr. Rowntree regards as a minimum." Great Britain is blamed for its inadequate wage and cost-of-living statistics, but with bad statistics and a bad "norm" the author is convinced that a gain in the standard of living of "about one-half per cent per year" means "deterioration" because this occurred "in a period during which real dividends and real profits doubled and trebled" (p. 119—no statistics).

Whether the generalizations are valid or not, this book may serve the author's social purposes—namely, to help workers "in their fight for higher wages, to assist trade unionists in negotiations for better living conditions."

ALBERT T. HELBING

LOVESTONE, J. *New frontiers for labor*. (New York: Workers Age. Pp. 22. 10c.)

PHELPS, O. W. *The legislative background of the Fair Labor Standards act*. (Chicago: Univ. of Chicago School of Business. 1939. Pp. ix, 71. \$1.)

SELLS, D. *British wages boards: a study in industrial democracy*. (Washington: Brookings Inst. 1939. Pp. xv, 389. \$3.)

SMITH F. P. *State minimum-wage laws and orders: an analysis*. Bull. no. 167. (Washington: U. S. Dept. of Labor Women's Bur. 1939. Pp. 34. 20c.)

SMITH, T. V. and TAFT, R. A. *The Wagner Labor Relations act—sit down or get up?* Foundations of democracy no. 9. (New York: Columbia Univ. Press. 1939. Pp. 22. 10c.)

STONE, E. L., compiler. *Selected list of recent references on minimum wage for women in the United States*. Suppl. to bull. no. 42 of Women's Bur. (Washington: U. S. Dept. of Labor Library. 1939. Pp. 9; 8.)

TAYLOR, A. G. *Labor problems and labor law*. (New York: Prentice-Hall. 1938. Pp. xiii, 663. \$3.75.)

This is a textbook for elementary college courses in labor problems. It deals with all subjects usually dealt with in such courses, plus some others which are not generally thought of as labor problems.

The book is divided into six parts and twenty-five chapters. Among the subjects treated are the labor movement, consumer coöperation, employers' associations, labor legislation, social insurance, the rôle of the government in industrial conflicts, personnel management, and specific labor problems, such as unemployment, child labor, women's work, hours of labor, convict labor, and immigration. None of these subjects is treated in sufficient detail so that this study might serve as a textbook for the specialized courses in these fields which are offered in many universities. It is designed for use in colleges and universities which offer but a single course in labor, and for introductory courses, in larger institutions, which attempt to give students a brief review of all aspects of labor problems.

The largest amount of space is devoted to labor legislation and the law of labor combinations and labor disputes. Among the best chapters are those devoted to "machines and men" (technological unemployment), "public powers and labor law," child labor, convict labor, immigration, employers' associations, and the settlement of labor disputes. Least adequate is the treatment of the labor movement, collective bargaining, and personnel management.

While on some subjects strictly up to date, this volume almost completely ignores the developments of the New-Deal period in the treatment of other subjects, among these, the legal position of the labor unions, to which the author devotes several chapters.

The reviewer has never attempted to teach a course which covers all aspects of labor problems in a single semester. There are many such courses and this is the first book which endeavors to meet their peculiar needs. Whatever faults it may have, it is a pioneer undertaking and the author deserves credit for trying something new in a textbook in labor problems. The style is readable and the treatment direct and simple. While presenting little that is original, the author has read most of the books in the field and abstracts reasonably well the information they give. Interesting is the emphasis upon labor legislation and court decisions, which the reviewer regards as proper in view of the increasing rôle of government in labor relations.

Not a book for the specialist, this new textbook in labor problems is worthy of consideration for single semester courses in this field.

EDWIN E. WITTE

The closed shop. Stud. in personnel policy no. 12. (New York: Nat. Industrial Conf. Board. 1939. Pp. 11.)

The effect of labor relations in the bituminous coal industry upon interstate commerce. Nat. Labor Rel. Board bull. no. 2. (Washington: Supt. Docs. 1938. Pp. ix, 77.)

The bituminous coal mines supply half the energy utilized in transportation and industry in the United States. About three-fourths of the coal produced is sold outside of the states where it is mined, and approximately 97 per cent must be transported to the places of consumption, chiefly by rail. Bituminous coal constitutes nearly a third of the freight tonnage of the

railroads, and they are more dependent on it for income and good operating conditions than on any other group of commodities. The elaborate statistical tables and effective charts, containing data gathered from numerous public documents and commission reports, show the disastrous economic and social consequences, during the past fifty years, of the continuous warfare between the mine owners and their employees. Federal control as during the period of the N.R.A. codes, or the more orderly negotiations made possible by strong, centralized labor unions, which have won and administered the recent Appalachian agreement, make possible more satisfactory operating conditions for the railroads as well as for the mine owners and workers.

LUCILE EAVES

International Labour Conference, twenty-fifth session, Geneva, 1939. Rep. i. Technical and vocational education and apprenticeship. Rep. ii. Regulation of contracts of employment of indigenous workers. Rep. iii. Recruiting, placing and conditions of labour (equality of treatment) of migrant workers. Rep. iv. Regulation of hours of work and rest periods of professional drivers (and their assistants) of vehicles engaged in road transport. Rep. v. Generalisation of the reduction of hours of work in industry, commerce and offices. Rep. vi. Reduction of hours of work in coal mines. (Geneva: Internat. Labour Office. 1939. Pp. 251; 121; 167; 171; 211; 125.)

International Labour Conference, twenty-fifth session, Geneva, 1939. Summary of annual reports under Article 22 of the constitution of the International Labour Organization. (Geneva: Internat. Labour Office. 1939. Pp. 372.)

League of Nations, International Labour Organisation and the United States: an annual account by a group of Americans in Geneva. Geneva stud. vol. x, no. 1. (Geneva: Geneva Research Centre. 1939. Pp. 66.)

The minimum wage—an international survey. Stud. and rep. ser. D (wages and hours of work), no. 22. (Geneva and Washington: Internat. Labour Office. 1939. Pp. viii, 257. \$1.25.)

This comprehensive survey of minimum-wage legislation was prepared in response to a real need for up-to-date information on recent changes and developments in the numerous countries that have introduced legal regulation of wages in certain industries. Although the present study covers only about one-half of the countries that have such legislation, the analysis is to be expanded later to include the others. The countries included in the present volume are Australia, Belgium, Czecho-Slovakia, France, Great Britain, Ireland, New Zealand, Peru and the United States. Each monograph in the present series describes the origin, development, existing status, and application of minimum-wage laws in the respective countries. Such description is supplemented wherever possible with a brief examination of the major problems encountered in the administration of the statutes and the general nature of the results of wage regulation. Appended to each monograph is a good working bibliography of recent contributions to the subject-matter.

Although the study adheres rather strictly to its expressed purpose of descriptive analysis and refrains from critical appraisal, the various contributors do not hesitate to point out in a constructive manner the obvious deficiencies of existing legislation and the desirable lines of improvement. Both this and the succeeding volume will be welcomed by specialists in the field of labor

relations and administrators of minimum-wage laws, to whom it will prove a valuable guide.

GORDON S. WATKINS

Philadelphia labor market studies: radio workers; weavers and loom fixers; machinists; hosiery workers. (Philadelphia: WPA, Nat. Research Project. 1938; 1939. Pp. xiv, 102; xiv, 100; xiii, 132; xiv, 100.)

Questions and answers on Fair Labor Standards law. (New York: Internat. Labor Defense. 1938. Pp. 8.)

Wages and hours of labour in Canada 1929, 1937 and 1938. Issued as a suppl. to the *Labour Gazette*, March, 1939. (Ottawa: Dept. of Labour. 1939. Pp. 170.)

Money, Prices, Credit, and Banking

Silver Money. By DICKSON H. LEAVENS. (Colorado Springs: Cowles Commission for Research in Economics. Bloomington, Indiana: Principia Press. 1939. Pp. xix, 439. \$4.00.)

Here is a book which should be required reading for all members of Congress as well as for all others who have anything to do or say about silver. The author, who is managing editor of *Econometrica*, has brought to his task an impressive background of experience and research: nearly twenty years in China, twelve of them in financial employment with fluctuating silver prices an important practical problem; years of study and research in the subject as evidenced by numerous articles on silver and monetary problems in various journals; and service in China and India as special agent of the U. S. Treasury.

Nearly half of the book is devoted to a summarization and synthesis of the wealth of materials dealing with the nineteenth and early twentieth centuries. This provides a conveniently compact and authoritative restatement of the history of silver as a monetary metal. The chapters on China, India, and other countries will be of particular value to those American students who have confined their study of the silver question largely to American phases. Even the chapters on American monetary history offer occasional fresh interpretation. For instance, Mr. Leavens defends the Pittman act of 1918 on the ground that it must be judged as a war measure rather than as monetary legislation. In his own words, "the act served its war purpose, and did not cost the country a cent. . . ." A questionable statement is that in which the Windom plan (1889) which proposed to vary the number of Treasury notes in circulation according to variations in the market price of silver is compared with the recent Fisher and Warren proposals.

The second half of the book presents a careful and dispassionate study of silver agitation and legislation of the present decade and is based primarily on government reports and contemporary newspaper accounts

taken from both the American and Chinese press. Mr. Leavens rejects all the arguments that something needed to be done for silver in 1933-34. However, he also rejects the reasoning of those who hold that the effects of the silver policy have been inflationary. What has happened is that the Treasury has encumbered itself with a huge hoard of silver which it can neither push into circulation nor sell to other countries. In an effort to aid American silver producers, we have forced China off the silver standard and thus deprived these producers of their best customer when the American government is not in the market. Mention is made of "compensatory forces" of increased demand, monetary and industrial, coupled with diminished world production which he believes would have followed a period of low prices if there had been no government aid. The new equilibrium, he believes, would have been "one which producers could view with equanimity."

This book brings out clearly that it is general instability of silver prices which has proved most injurious to those countries with money systems based all or in large part on silver rather than changes in the price of silver in any particular direction. This is illustrated in recent events in China in that that country found itself facing serious problems both when the price of silver fell in 1929 and 1930 and when the price of silver rose as a result of the American purchase policy.

The value of the volume is enhanced by a classified bibliography which includes practically everything of worth on silver published in English, an index of names which includes Humpty Dumpty, Iolanthe, and Omar Khayyam, a general index, and some forty pages devoted to appendixes which contain the usual reprints of laws and documents, supporting statistical data, and the like.

HAROLD W. GUEST

Baker University

Money in the Law. By ARTHUR NUSSBAUM. (Chicago: Foundation Press. 1939. Pp. xxxvii, 534. \$7.50.)

The events of the World War and more particularly those of the post-1929 era have raised anew the question of the relation of the government to money. The legislation of the last quarter century has altered radically the status of monetary units and monetary systems, so that it has attracted the professional attention of both lawyers and economists. Many have examined the changes made and have sought to evaluate them.

As the title of the volume indicates, Professor Nussbaum approaches the problem from the legal point of view. The work embodies the results of fifteen years' study, which have appeared from time to time in legal journals and books both here and abroad. The first third of the volume

considers usual topics such as the conception of money, the kinds of money and the monetary system. The remaining two-thirds of the work deals with the status of debts under fluctuating currencies and exchange control, as well as the efforts of creditors to protect themselves against loss.

It is interesting to observe the significance of Professor Nussbaum's general theories developed in his opening pages for his later discussion of debts. Professor Nussbaum contrasts money, the concrete object, with the "ideal unit," of which by common usage money is treated as a fraction, integer or multiple (p. 5). "The existence of a monetary unit is apparently a group-psychological phenomenon which can be traced historically" (p. 6). While the author leans toward the "nominalistic" theory rather than the "metalistic," he believes that ultimately society and custom decide whether coin or paper will be money, so that his "society" theory of money is opposed to the "state theory of money" (p. 29). However, in discussing the American monetary system Professor Nussbaum apparently emphasizes the short-run view that the state has full power over the currency.

Since debts are pecuniary obligations, they are subject to governmental interference (p. 213). While recognizing that inflation, which necessarily results in deflation, is always imminent under a managed currency (p. 248), Professor Nussbaum, ignoring the problem of justice between debtor and creditor, opposes the decision of the Reichsgericht revaluing German debts and adds that "an emergency situation does not confer revolutionary powers upon ordinary law courts" (p. 282). Thus the author upholds the decision of the Supreme Court in the American gold-clause cases, adding elsewhere that "there is no constitutional protection from unsound politics" (p. 289). He further approves the action of Congress in repudiating the gold clause in its own obligations, holding that "Congress wanted no more than to have the government participate in benefits accruing to every debtor from general monetary measures" (p. 368).

The volume contains a wealth of references to the literature on the subject, both American and foreign, and both historical and contemporary. It should be extremely useful to the economist in bringing together the legal decisions and cases dealing with monetary problems.

W. H. STEINER

Brooklyn College

NEW BOOKS

AGGER, E. E. *Utilizing the weekly federal reserve statement*. (New York: Am. Inst. of Banking. 1938. Pp. 162. \$1.50.)

AGHION, R. *Le contrôle des changes (législation et économie comparées)*. (Paris: Lib. Gén. de Droit et de Jurisprudence. 1939. Pp. 183. 22 fr.)

Most of the book is devoted to studies of the practice and results of rigid and moderate quantitative exchange controls in eleven countries and of the exchange funds of the Tripartite régime. For France control on the lines of

the Argentine dual rate system is recommended. Reflux of flight capital would be encouraged by a depreciated free rate, and further capital flight similarly discouraged. The official exchange market would be reserved primarily for merchandise trade. Payments for imports would be made at the official or free rate, depending upon the nationality and classification of the commodities according to officially determined domestic economic requirements; and policy in regard to exports would follow similar lines of discrimination.

Although the author's broad conception of the issues seems satisfactory, the country studies are sketchy and inconclusive, and numerous loose inferences weaken the argument. To take one instance: the depreciated free rate in the proposed system is expected to be a powerful stimulant of foreign trade and to make possible a reduction or elimination of the balance of payments deficit (p. 182). Previously it has been argued that depreciation of the franc has failed to achieve this end (p. 178). Finally it is held that as long as domestic policies are inconsistent with international equilibrium, even the strictest monetary control will be ineffectual (p. 183).

HORACE G. WHITE, JR.

ALDRICH, W. W. *The effect of easy money policies on savings, savings institutions, insurance companies, endowed institutions and commercial banks.* (New York: Chase Nat. Bank. 1939. Pp. 18.)

BEVERIDGE, W. *Prices and wages in England from the twelfth to the nineteenth century.* Vol. I. *Price tables: mercantile era.* (London and New York: Longmans Green. 1939. Pp. lx, 756. \$12.)

BOULLE, R. *Les grands établissements de crédit devant la crise.* (Paris: Sirey. 1938. Pp. 204.)

In this work M. Boulle traces the impact of business conditions during the period 1930-1936 on the three leading commercial banks in France: Crédit Lyonnais, Société Générale, and Comptoir National d'Escompte. Bounded on the one hand by the first year of the world slump and on the other by the devaluation of the franc, the period under consideration presents an interesting contrast of relative strength in the early years and marked weakness in subsequent years. In this setting the author attempts to describe the behavior of these banks in terms of five categories: resources, the utilization of these resources, liquidity, investment activity, and branch banking. A chapter is devoted to each of these matters, the emphasis being placed on a comparison of developments both between sub-periods within the seven-year interval and between the banks. Given the scope of the study, the author succeeds in presenting in an interesting and suggestive manner a segment of the life of these three banks.

VIRGIL SALERA

BRATTER, H. M. *Effects of the silver program at home and abroad.* (New York: Economists' Nat. Committee on Monetary Policy. 1939. Pp. 39, mimeographed.)

An analysis of the silver program made by Herbert M. Bratter before the Senate Banking and Currency Committee. Distributed by the Economists' National Committee on Monetary Policy, 70 Fifth Avenue, New York City.

- FOSTER, L. B. R. *Small loan laws of the United States: a condensed summary*. 2nd ed. Pollak pamph. 37. (Newton, Mass.: Pollak Found. for Econ. Research. 1939. Pp. 23. 10c.)
- FOSTER, W. T. *Public supervision of consumer credit*. Pollak pamph. 36. (Newton, Mass.: Pollak Found. for Econ. Research. 1939. Pp. 21. 10c.)
- GRONDONA, L. S. C. *National reserves*. (London: Allen and Unwin. 1939. Pp. 190. 7s. 6d.)
- HARWOOD, E. C. *Current economic delusions and their probable future effects*. (Cambridge: Am. Inst. for Econ. Research. \$1.)
- . *What will devaluation and more inflation mean to you?* Rev. ed. (Cambridge: Am. Inst. for Econ. Research. 1938. Pp. 64. \$1.)
- HEILPERIN, M. A. *International monetary economics*. (New York: Longmans Green. 1939. Pp. xiv, 281. \$4.20.)
- HÜTTER, J. P. *La question de la monnaie d'argent aux Etats-Unis des origines à 1900*. (New York: Stechert. Paris: Presses Modernes. 1938. Pp. 493. 75 fr.)

Undertaken at the suggestion of Professor Hauser, prepared in part under Professor Gregory, and continued in America at several universities and among the archives of various state historical societies, Dr. Hütter's painstaking historical inquiry into the political and social aspects of the silver question up to 1900 constitutes a model of research as well as a repository of heretofore widely scattered material. This is another instance in which the scholarly treatment of a large domestic issue represents the work of a foreign student. Consisting of seven chapters, the book contains a brief summary of the American monetary "system" up to the Civil War, followed by a thoroughgoing analysis of the manner in which the politicians and sundry pressure groups made the most of a situation or series of situations with the broad outlines of which most of us are familiar. An extensive bibliography, covering 35 pages, enhances the usefulness of this interesting volume.

VIRGIL SALERA

- DE KOCK, M. H. *Central banking*. (London: P. S. King. 1939. Pp. xiv, 354. 15s.)
- MURAD, A. *The paradox of a metal standard: a case history of silver*. (Washington: Graphic Arts Press. 1939. Pp. xii, 212. \$2.50.)
- DE STRYCKER, C. *Les fonctions et les opérations de la Banque Nationale de Belgique de 1914 à 1938*. (Brussels: Goemaere. 1939. Pp. xxiv, 344.)
- TURNER, R. C. *Member-bank borrowing*. (Columbus: Ohio State Univ. Bur. of Business Research. 1938. Pp. xiv, 243.)

This analysis of the factors determining the volume of member-bank borrowing begins with a consideration of the meaning, function and problem of reserves in American banking. Reserves as used in the text mean member-bank deposits at the reserve banks, their function is to limit the expansion of deposits and the problem involved in connection with their administration is to match reserve balances with reserves required. Obviously this can be done by changing either reserve balances or reserves required.

Changes in reserve balances result from changes in the monetary gold stock, in Treasury and national bank currency, in reserve bank credit, in money in circulation, or in other factors using reserve funds. These five groups of factors are likewise the sources of reserve funds and the uses to which such

funds may be put when not employed as member-bank reserve balances. To some degree the supply and uses or demand for reserve funds are amenable to control by the member-banks and are counterbalancing in effect.

If the banker seeks to alter reserves required, he discovers that his commitments in the customers' loan market are so influenced by personal considerations as not to be adaptable to making adjustments. Open-market loans, on the other hand, are impersonal and are a suitable medium for making adjustments to changes in reserves. However, even in this market there are differences in the adjustability of the constituent parts.

From a study of these fundamental relationships, the author passes to a critical examination of the two leading theories of member-bank borrowing. The "need" theory explains the variations in the volume of member-bank borrowing on the basis of their need for reserve funds to enable them to accommodate their customers. The "profit" theory holds that banks increase or decrease their borrowing in proportion to the relative profitability of the operation.

A fairly accurate statement of the rather detailed conclusions is that neither theory offers a complete explanation of member-bank borrowing and that the two theories are not mutually exclusive.

JAMES HOLLADAY

WEAVER, F. *Oklahoma's small loan problem*. (Oklahoma City: Bond Printing Co. 1938. Pp. xi, 116.)

This monograph, financed by one of the largest small-loan chains, is written by the director of the Bureau of Business Research of the University of Oklahoma. The author presents a detailed picture of the personal finance business in his state, covering the finances of borrowers, the rates charged by unregulated companies, the organization and finances of such companies, their business policies and practices, competition in the field, the movement for reform and suggestions as to the desirable features of a regulated system of lending.

But for the numerous publications by the Russell Sage Foundation, this book might well be considered as a definite contribution to knowledge of this field. As it is, Professor Weaver has made an application to the State of Oklahoma of the generalizations already enunciated in the Sage publications. He points to the well known abuses of unregulated lending: exorbitant rates, perpetual borrowing, and the exploitation of necessitous borrowers. On the basis of this exposé, admittedly a serious indictment of the adequacy of our financial institutions, Professor Weaver recommends the legislative enactment of a plan substantially identical with that proposed by the Russell Sage Foundation under the uniform small-loan law. He does not indicate the need for any modification of the Russell Sage proposal. There is no suggestion that small-loan companies should be given the status of public utilities nor is there any recognition of the fact that the rate to be charged is a function of the type of borrower to be accommodated. Rather, he holds that a specified rate of interest is necessary to attract capital into the field and to assure a reasonable return thereon. Both he and the Russell Sage Foundation ignore the fact that the first problem to be decided is that of the least common denominator among prospective borrowers to be cared for. Once having decided this, and having made provision for the elimination of

unnecessary duplication, it then becomes possible to determine the rate of interest that must be charged. This reviewer believes, and has so indicated in reviewing the Sage publications from time to time, that the only rational approach involves a determination in the beginning of the clientele that is to be accommodated.

CLYDE OLIN FISHER

WELFLING, W. *Savings banking in New York State*. (Durham: Duke Univ. Press. 1939. Pp. xiv, 205. \$3.)

The distribution of mutual savings banks is limited to 17 states, yet their deposits have approximated \$10 billion. Dr. Welfling has made a comprehensive, objective study of the problems of management and supervision as they have evolved in New York State. Part 1 through part 3, 64 pages, covers the general experiences from 1816 to 1929. Part 4, two-thirds of the volume, is centered upon the effects of the depression and subsequent developments. Personal interviews with prominent bankers provided materials for sample group analysis. Interesting monthly and seasonal data are included in chapter 10 on bank liquidity and the activity of deposits.

The deposits in New York State banks have come mainly from relatively small savings fairly in harmony with the original conception. Large deposits have constituted something of a problem: these occur when the opportunity for investment has been slight, bond values high, and savings bank returns attractive; subsequent withdrawals have been heavy for investment and speculation. In 1933, 4.3 per cent of the depositors had balances of more than \$5,000. The legal maximum of \$7,500 is high. Apparently there has been no legal restriction upon the amount deposited per month. Cyclical and seasonal economic conditions have influenced deposits and withdrawals, but dividends left with the banks have been a stabilizing factor.

Portfolio management reveals distinct shifts in emphasis. Valuation policy has an intimate bearing upon surplus and immediate solvency. The purchase of bonds for holding to maturity is now giving way to considerations of substitution, marketability, and maturity sequence. Low returns and losses through liquidation in 1893 and 1907 led to mortgage investments. An illuminating discussion of the management of mortgages and real estate in recent years is presented. About 6 per cent of the resources in 1935 was "other real estate." Thought is now turning to amortization contracts. The Savings Bank Trust Company and the Institutional Securities Corporation, owned by the banks, together with the Mutual Savings Bank Fund, all provided for in 1933, are not only to help meet emergencies but are intended to be coöperative in assuming intimate advisory and managerial responsibilities.

Competition has found expression throughout in dividends paid to depositors. The last chapter discusses existing competition with particular emphasis upon financing agencies of the United States government and the higher returns now obtainable for the small saver in United States savings bonds.

E. C. BANCROFT

Banco Central de Reserva del Perú: memoria, 1938. (Lima: Banco Central de Reserva del Perú. 1939. Pp. 92.)

The earning power of banks: a study of changes in political, social and economic conditions affecting banking, resulting modifications in the banking structure

and necessary adjustments in practical bank operations. (New York: Am. Bankers Assoc. 1939. Pp. 93. \$1.)

The federal reserve system: its purposes and functions. By the Board of Governors of the Federal Reserve System. (Washington: Nat. Capital Press. 1939. Pp. 128.)

Money and banking, 1938-39. Vol. I. *Monetary review.* Vol. II. *Commercial and central banks.* (Geneva: League of Nations Econ. Intelligence Serv. New York: Columbia Univ. Press. 1939. Pp. 173; 202. \$1.25; \$1.50.)

The first of these two volumes brings together the essential developments during 1938 and the first two months of 1939 in foreign exchanges and gold movements, currency, credit and government finance. A detailed and accurate analysis of the monetary policy of the United States is given, together with a comprehensive survey of the recent structural changes in the federal reserve system. In an appendix containing 15 international tables, the monetary statistics of the world are summarized.

The facts and figures for 44 countries on which the "review" is based are given in detail in the second volume. The statistical data for the United States are taken from the reports of the Federal Reserve Board and of the Federal Deposit Insurance Corporation; the tables referring to the commercial banks show the combined accounts of national banks, state banks, trust companies, stock-savings banks and private banks.

J. C. ROCCA

The significance of new orders and monetary factors for determining production, and commodity and security prices. (New York: Inst. of Applied Econometrics. 1939. Pp. 20.)

Small loan legislation in New York. (New York: N. Y. Assoc. of Personal Finance Companies. 1938. Pp. 32.)

Public Finance, Taxation, and Tariff

Financing Government. By HAROLD M. GROVES. (New York: Holt. 1939. Pp. xvi, 777. \$3.75.)

The title of Professor Groves's book corresponds with his whole general approach to the fiscal problem. He is concerned with the problems and processes of "financing government" in their dynamic aspects, and in the changing institutions that produce these problems and processes. In the development of public finance, "the changes that have taken place have not been so much in the types of taxes and expenditures as in their degree and in the environment in which they operate—the economic institutions" (p. 20). His realistic approach may be observed in his methods of dealing with the problem of justice and expediency. "In other words, justice requires not identity, but impartiality of treatment" (p. 27). But, "obviously there are many matters besides justice which must be taken into account in making practical decisions. . . . Social expediency in the distribution of governmental burdens consists of choosing those sources which produce the

best or least undesirable results. It includes justice and much more. Thus it appears that justice in the tax system, beyond impartiality of treatment, consists of what seems fair and equitable to the particular critic" (p. 28).

The spinning of refined theory is left to other treatises. He does not attempt to develop any theory of the state within which to organize a philosophy of finance. He takes the state as he finds it and concerns himself with its processes as a "going concern." In his treatment of "shifting and incidence" he does not make use of the conventional diagrams, preferring more complicated tabular demonstrations as better representing reality. The limitations of the theory of shifting based upon the marginal analysis of prices are emphasized, especially the immobility and control of factors, and the general inconclusiveness of deductive reasoning. He also places more than the usual amount of emphasis on the rôle of demand in the shifting process.

His greater concern with the processes of finance than with subtle theory explains his neglect of exactness in the definition of concepts, so important in the logic found in works like those of H. C. Adams, Seligman, Bastable, Pigou, and Marshall. After a brief discussion of the various types of public revenue, for example, he dismisses fundamental classification with the statement, "At best the difference between these categories is a matter of degree and boundaries between them are not very distinct" (p. 411). It is true that the boundaries of various groupings in either the social or the natural orders are never distinct, but certainly precision in scientific thought demands classifications, the criteria for which are clear cut.

In his philosophy of approach, Groves is a "progressive." "Probably it is correct to say that in most countries the predominant view is that governments should assume an active and positive rôle, both in the control of industry and in the provision of services, but that they should leave in private hands, and mainly under private control, the chief functions of the economic system" (p. 518). Concerning social security, he believes that "one of the soundest arguments in behalf of unemployment insurance is that unemployment should be regarded as one item in the overhead cost of doing business and should be paid for by business or its customers" (p. 35). Regarding taxes for old-age insurance, "it is to be hoped that they will be retained in the main as originally designed" (p. 386). He accepts the principle of the undistributed corporate profits tax, and holds that "unless we accept the view that savings do not constitute income, the exemption of corporate reinvestments from taxation is fundamentally incompatible with a graduated personal income tax" (p. 206).

The book is particularly well done throughout. Not only is it informative and critical, but it is also suggestive. This is the first text within the reviewer's knowledge that calls attention to "value added" as a possible base upon

which to apply rates for business taxation (p. 273). It is unfortunate that Professor Groves did not develop the possibilities of this base further. It was originally outlined by T. S. Adams ("Fundamental Problems of Federal Income Taxation," *Q.J.E.*, Aug., 1921) and later embodied by the Brookings Institution in its recommendations for tax reform in several of its reports on state tax systems, particularly the one for Alabama in 1932 and the one for Iowa, also in 1932. This base, apparently embodying all of the principal advantages of both the gross earnings tax and the tax on net earnings, is apparently without the serious defects of either. It undoubtedly has potentialities that should be examined in any program for reform in business taxation.

The organization of subject matter is a departure from the orthodox. Since taxation presents the most challenging field of public finance, he treats sources in advance of expenditure. The chapter on shifting and incidence is sandwiched between the chapters on property and income taxation in order "to give the student some exposure to the practical problems of taxation before he becomes too heavily absorbed in their theoretical aspects." Part 3 is devoted to institutions and problems of the revenue system as a whole; part 4 to public expenditures; part 5 to public borrowing; and part 6 to fiscal administration and to fiscal policy as a factor in prosperity.

The book is abundantly supplied with footnotes for purposes of both supplementary context and documentation, and has a carefully prepared list of selected readings at the end of each chapter. It is characterized by the crispness, frankness and subtle humor that everyone who knows the author will recognize and appreciate. The style is clear and simple.

ROSCOE ARANT

University of Mississippi

NEW BOOKS

BIRNIE, A. *Single-tax George*. (New York: Nelson. 1939. Pp. 159. 75c.)

DOCKERAY, J. C. *Public utility taxation in Ohio*. Grad. School ser. contrib. in econ. no. 2. (Columbus: Ohio State Univ. Press. 1938. Pp. xiii, 200. \$2.40.)

This study, conducted in 1934 and 1935, was undertaken "in an effort to determine the effect of the Ohio public utility tax law upon the various sizes and classes of public utility companies" (p. vii). Its purpose as well was "to provide more positive and objective answers" to such questions as these: "Could all sizes and classes of utilities stand added taxes? If so, could the different companies stand the added tax burden equally well?"

The book is divided into eleven chapters. The first three are devoted to a study of the history and development of the Ohio scheme of taxing utilities, which include railroads, car lines, pipe lines, express companies, telephone and telegraph companies, as well as gas, electricity, water, heating and similar concerns. Succeeding chapters are devoted to public utility valuation, the valuation method, apportionment, the excise tax, the effect of the intangible tax law of 1931, burden analysis, and the excise tax on sleeping car, freight

line, and equipment companies. A final chapter summarizes the work and presents the conclusions of the author. The value of much of the statistical work in the study is limited because of the requirement of Ohio laws that data in tax returns are confidential, a condition clearly pointed out by the author throughout the text. There are numerous suggestions for the improvement of Ohio tax laws; their administration is wholeheartedly approved. That rural districts receive relative advantages over urban areas under the Ohio tax system is clearly shown.

The volume contains many tables, with data generally brought down to 1935, and a modest statistical appendix. There is a table of cases cited, a short bibliography, and a good index. The work seems to be carefully documented throughout.

SIMEON E. LELAND

EINAUDI, L. *Il sistema tributario italiano*. (Turin: Giulio Einaudi. 1939. Pp. xv, 349.)

KRUG, E. A. *Why taxes? What they buy for us*. (Boston: Ginn. 1939. Pp. 80. 60c.)

LEONARD, J. M. *The direct tax burden on low income groups*. (New York: Nat. Municipal League. 1939. Pp. 31.)

This is a comparative study of state and local tax burdens in 310 cities in the United States in 1937. The principal taxes included are property, sales, and motor vehicle taxes. The comparative burden is measured for a hypothetical family of four with a \$2,500 income and a \$5,500 home. Perhaps the most important conclusion is that the tax burden varies more with the nature of the tax system than with the size of the city. It is also interesting to note that the burden is not materially lower for a family with a \$5,500 home, in the states with homestead exemptions (excepting Florida) than in the other states. In the absence of data on burdens for families with varying incomes and data on the extent of government services in the different cities, no conclusions can be drawn as to the relative equity of the different systems. Nevertheless the study is one of the most extensive of the many recent tax burden studies. It is sound as far as it goes. The author himself has carefully noted its limitations. And it is a genuine contribution, both in technique and findings, to the important problem of measuring the tax burden.

MABEL NEWCOMER

LHOMME, J. *L'impôt sur le revenu en Angleterre: traité théorique et pratique*. (Paris: Lib. Gén. de Droit et de Jurisprudence. 1939. Pp. 468.)

Jean LHomme's monograph deals with both the practical and theoretical aspects of the British income tax. He traces the origin and evolution of the tax dividing his historical treatment into two periods, 1799 to 1914 and 1914 to 1938. This division was made because of the great increase in income-tax rates occurring at the beginning of the World War. Extensive statistical evidence is presented to support conclusions concerning the fiscal rôle and changing character of the income tax. A large portion of the book discusses the form of the tax, including the legal aspects of tax administration, the determination of taxable income, the five schedules, the rates of taxation, deductions, methods of payment, disputed claims, the surtax and the national defense contribution. LHomme concludes with an analysis of the advantages and disadvantages of

the British income tax, a discussion of projected reforms and a comparison of the British and French tax systems.

WILLIAM WITHERS

MACGREGOR, D. H. *Public aspects of finance*. (New York and London: Oxford Univ. Press. 1939. Pp. 137. \$1.75.)

MAGEE, J. D. *Taxation and capital investment*. (Washington: Brookings Inst. 1939. Pp. viii, 64. 50c.)

Advance publication of a chapter of a research project of the Brookings Institution relating to "capital expansion, employment and economic stability," to be published in the autumn.

MAGILL, R. and SHOUP, C. *The Cuban fiscal system, 1939: a study made at the request of the Secretary of the Treasury*. (New York: Authors, Columbia School of Business. 1939. Pp. viii, 127.)

PIATIER, A. *L'évasion fiscale et l'assistance administrative entre états*. (Paris: Sirey. 1938. Pp. 362. 50 fr.)

The author deals with two different problems in the same work—namely, fiscal evasion and administrative assistance between different governments. He does not limit himself to clarifying the common points of the two problems, but he analyzes the principles of each. The difference between fiscal fraud and evasion is carefully outlined in the first part. The measures against fiscal evasion taken by individual countries are fully described in the second part. In the third part international administrative coöperation in matters of taxation is discussed as a system of curbing evasion and as a solution of the problem of double taxation. The workability of international fiscal collaboration is hampered in many different ways. Leaving aside the handicaps strictly technical in character, the most difficult obstacles are those concerned with public order and differences in political regimes. The greater the degree in similarity of the political regimes, the greater is the possibility of mutual legislation needed against tax evasion.

In order to make effective personal taxation in the international field, a super-national board would be needed, but never more than today has this seemed an unobtainable objective. In the present political circumstances, it is even to be questioned whether an international collaboration in the matter is to be desired. This work, which was originally drafted as a thesis for the doctor's degree at the University of Paris, is a scholarly treatise and a valuable contribution to the international tax problem.

FAUSTO R. PITIGLIANI

REID, M. G. and BRITTON, V. *Iowa incomes as reported in income tax returns*. Res. bull. 236. (Ames: Iowa State Coll. Agric. Exp. Station. 1938. Pp. 116-189.)

STEIN, H. *Government price policy in the United States during the World War*. (Williamstown: Williams Coll. 1939. Pp. viii, 138.)

SWIFT, F. H. *European policies of financing public educational institutions*. IV. *Germany*. Univ. of California pubs. in educ., vol. 8, no. 4. (Berkeley: Univ. of California Press. 1939. Pp. xviii, 345-693.)

Digest of state laws relating to inheritance and estate taxes, 1938. (Washington: Census Bureau. 1939. Pp. 147. 20c.)

Federal aid and the tax problem. Staff stud. no. 4. (Washington: Advisory Committee on Educ. 1939. Pp. 101. 15c.)

Financing Michigan's government: 1930-1938. Michigan pamph. no. 2. (Ann Arbor: Univ. of Michigan Bur. of Govt. 1939. Pp. 26.)

International double taxation: an outline of the problems involved, the measures recommended, and the progress made for its elimination or limitation. Doc. no. 6. (Paris: Internat. Chamber of Commerce. 1939. Pp. 40.)

The problem of stock transfer taxation in the State of New York. Prel. rep. (New York: Committee for the Study of Federal and State Stock Transfer Taxes. 1938. Pp. vi, 61.)

The report is based upon an investigation made by Dr. Paul Studenski of New York University. Stress is laid upon the loss of revenue to the State of New York because of the diversion of business to exchanges in other states. The report also criticizes the existing system of double taxation of odd-lot trading. *School costs, taxation and sources of revenue, ability to support public education, distribution of state subsidies: report of the Committee on Survey of School Costs, submitted to the House of Delegates, December 28, 1938.* (Harrisburg: Pa. State Educ. Assoc. 1938. Pp. 203.)

Tax exemptions. (New York: Tax Policy League. 1939. Pp. 244. \$3.)

Tax systems of the world: a year book of legislative and statistical information including all the states of the United States. 7th ed. 1939 suppl. By the Tax Research Fund. (Chicago: Commerce Clearing House. 1939. Pp. 31.)

Taxation and recovery: the area of agreement at the 2nd Fortune Round Table. Reprinted from *Fortune* for May, 1939. (Chicago: Fortune. 1939. Pp. 33.)

Population and Migration

France Faces Depopulation. By JOSEPH J. SPENGLER. (Durham: Duke Univ. Press. 1938. Pp. xi, 313. \$3.00.)

Opportune in a world where the counting of heads is an obsession, Mr. Spengler's volume is informative and thought-provoking. Students of social questions must be grateful for this review and evaluation of literature from a country which, longer than any other western nation, has faced the fear of decreasing natality while numerical superiority seemed vital to national existence.

In the five centuries covered by the review the significant development is the expansion during the eighteenth century of emphasis upon "natural checks" and upon individual right to seek happiness of even the common people. On these foundations was based a denial of population-promoting policies of the *ancien régime* which emanated from the fear that France in the struggle for national power and expansion was a weak contender. This alarm did not appear again until near the turn of the nineteenth century when younger nations rose to demand a place in the sun. Confirmed in its dread by the defeat of 1870-71, France became a laboratory for testing policies to cure sterility and increase natality.

Explanations of the decreased birth rate given by the French themselves hypothecate a knowledge of contraceptive devices. The query was, then, why are such devices used. Answers must consider motivation in an unwillingness or an incapacity on the part of small or large groups to support offspring. Legislation against professional giving of birth control information was not passed until 1920 when knowledge was so widespread that it needed no official and little commercial encouragement for its persistence.

Serious consideration of the problem of depopulation leads necessarily, then to a "more complete formulation of the proposition that fertility in a given physical environment is a function of the pattern of culture" (p. 280). The elements in the pattern may be some favorable, some inimical and some neutral to fertility. For the last two centuries at least, technological changes have been "prime movers" toward cultural change, and their impingement upon individuals has not increased stimuli favorable to reproduction—quite the reverse (p. 285).

The net result of these concurrent forces has been an assault upon the family as the reproductive unit; and motivation toward increase in natality lies in reestablishing conditions for a stable family unit at the core of individual living or in the substitution of other operational arrangements.

Mr. Spengler's analysis of the determination of ability to support offspring lies in calculation of *per capita* production. The discussion is confused by the failure of the author to hew to the line of quantitative calculation. Per capita production or even per capita consumption of goods and services are terms upon which we may conceivably agree. But the projection of "general welfare per capita," a correlate of "physio-psychic" states, takes us into a field of hierarchical dialects which seems inconsistent with the author's insistence upon the validity of individual determination of its share in the increase of population. The balance of births and deaths is a calculable figure at any given time and may be projected into the immediate future at least, with reasonable accuracy. It is suggested that there is a reasonably satisfactory measure of human welfare in the amount of biological life available to individuals. The "average expectancy of life" as compared to the potentialities of the situation might be accepted as a measure of well being. Mr. Spengler does not give due weight to this possibility but neither does the French nation.

In their national population policies "I will not" has waited upon "I will" to negate attempts to secure the desired end. The failure may be inherent in the doctrinal schisms of democratic capitalism (pp. 295-300). Historically, programs from the days of Colbert have subsumed the need for military power through numbers and the obligation of "lower classes" to produce goods or people as the "upper class" or the state wishes. It is the collision of these hypotheses with the equalitarian dogma as it emerged

into the "patterns of culture" and more specifically into the widening interstices of a property integrated and patriarchally dominated family which has rendered ineffectual all attempts of the French government to induce its people to rear large families.

A case in point is the system of family wages. In so far as inadequate family income is the motivation for limitation it might be effectual. Whether a resulting increase among lower income groups would result in a lower level physically and mentally for the nation depends upon whether genetic superiority is the monopoly of upper income groups. It has been assumed that this is a sound thesis. When higher income groups receive payments related to size of family, payments must be large. Heavy taxes on high income groups are necessary to secure funds. The outcome may be lower incomes for the very groups whose increase is desired. Such programs, if undertaken with large reservations, as they are in all western states, prove self-erasing. Undertaken without reservations, the resulting changes in distribution of income and in organization of production will be revolutionary for the economic set-up.

It might be suggested also that the positing of the determination of optimum population upon the exhaustibility of resources is open to question. If resources are technologically defined, and Mr. Spengler suggests that such is the case, can we accept as valid a conclusion that in the "long run point of view none of the factors and conditions mentioned is as significant as the rate at which the supply of exhaustible resources is diminished" (p. 260)?

It may be carping to suggest these deficiencies in the provocative interpretations which are drawn from the author's study. They indicate a fallibility which proves his kinship with all students who attempt to steer between a vague desideratum of individual liberty and the necessary bulwarks of social regulation.

The book is highly recommended to those whose thinking runs to the query, what will happen to the democratic nations if their birth rate continues to fall in the face of an increase among fascist nations. They will find either a conclusive argument for despair or reason for reëmphasis upon a continuing search for the integration culturally and individually of economic and political freedom.

RUTH A. ALLEN

University of Texas

NEW BOOKS

- GINSBURG, L. *Parenthood and poverty: the population problem of democracy.* Fabian res. ser. no. 43. (London: Fabian Society. 1939. 1s.)
- GRAUNT, J. *Natural and political observations made upon the bills of mortality.* Edited by WALTER F. WILLCOX. (Baltimore: Johns Hopkins Press. 1939. Pp. xiii, 90. \$1.50.)

URLANIS, B. C. *The history of the United States census (in Russian)*. (Moscow: Gosplanizdat. 1938. Pp. 311. 10 rubles.)

This is a historical and critical description of the American censuses since 1790. Following the judgment of Lenin, the author comes to the conclusion that "the data of the American census, in spite of their class tendency always directed in favor of the ruling classes, may serve as a valuable means of analysis. No similar statistical source exists in the whole world."

The bibliography and table of contents are in English.

P. H.

Aperçu de la démographie des divers pays du monde, 1929-1936. (La Haye: Inst. Internat. de Statistique. 1939. Pp. 433. Fl. 8.)

Social Problems and Reforms

NEW BOOKS

ALDRICH, W. W. *The incompatibility of democracy and a "planned" economy*. Address at Washington and Jefferson College, June 3, 1939. (New York: Chase Nat. Bank. 1939. Pp. 21.)

ANGELL, P. D. *The case for slum clearance by private enterprise: the proposed plan for public service building corporations*. (Chicago: Chicago Bldg. Congress. 1939. Pp. 24. 10c.)

BARNES, H. E. *Society in transition: problems of a changing age*. (New York: Prentice-Hall. 1939. Pp. xviii, 999, xvii. \$3.75.)

BINGHAM, A. M. *Man's estate: adventures in economic discovery*. (New York: Norton. 1939. Pp. 480. \$3.)

As a literary achievement, this book is highly to be commended. From the first page on, its brilliant presentation fascinates the reader. Most impressive are the chapters in which the author describes his own life and experiences, his growing up in an "economy of abundance" as the spoiled son of a wealthy Yale professor, his first grim disillusionment as a farm and a factory hand, his travels through the Far East, India, Russia and Western Europe, his talks with Gandhi and Mussolini, his gradual conversion to an anti-capitalistic philosophy. The frankness with which he analyzes his revolutionary period deserves appreciation too.

However, the scientific contribution which the book makes is rather modest. The interpretation of the Marxian theory and the analysis of the policies of the totalitarian states are neither complete nor always accurate. Moreover, the argument which runs through the whole book is too well known to require any lengthy discussion. It is a commonplace, that we are living in "a world of transition." Equally, we may agree upon the numerous parallels that may be found in the economic organization of the totalitarian states and the "old Democracies," especially the growth of the public sector and the intensification of public control. What we wish to know, what we are doubtful about, chiefly refers to the character of the forthcoming revolution and to the individual trends in the main economic fields: *e.g.*, which features of the various Four-, Five- and Ten-Year Plans and of the "New Deal" are to survive or may be considered as being only provisional solutions. Concerning these most vital questions, the author indulges in generalities or remains silent.

Occasionally he maintains that "the best shorthand description of the transi-

tion" is "from production for the market to production for use." At the same time, he admits that both elements, sale and use, are present in capitalism as well as in any "managed economy" (p. 374). He emphasizes unduly that the future economic organization should be termed "a guided or a managed or a directed economy" instead of a "planned economy." This is of course only a verbalization, so long as the differences are not explained. On the other hand, he minimizes the opposition between socialism and capitalism: the difference between them, he contends, is in many respects "verbal and unreal" (p. 89). Naturally, every member of the *republica litterarum* is entitled to choose the definitions he personally prefers. Nevertheless, I am afraid that a fruitful discussion is not aided by changing the traditional labels without any need.

Finally, he embarks on a comprehensive "New" New Deal program, which, although interesting in some details, is largely a collection of other people's ideas. I feel it is inconsistent for an author who suggests a cautious compromise between free competition and state control and prefers smooth terms like guided or managed economy, ultimately to shift to a drastic scheme of "integrated planning and control" in all economic fields, mainly agriculture and industry, purchasing power, new investment and foreign trade. He even suggests a general coordinating body similar to the Russian Gosplan.

The book suffers from rationalization, over-simplification and utopianism. For the same reasons, it may give comfort to many people, disturbed by the gloomy prospect of the political and economic scene. "The whole drift of the argument of this book is that the basic ills of our economic system are curable and are being cured" (p. 441).

FRITZ KARL MANN

BLIVEN, B. *The Jewish refugee problem*. (New York: League for Industrial Democracy. 1939. Pp. 1-26. 15c.)

BRECKENRIDGE, S. P. *The Illinois poor law and its administration*. (Chicago: Univ. of Chicago Press. 1939. Pp. 552. \$4.)

CHAWNER, L. J. *Residential building*. Housing monog. ser. no. 1. (Washington: Supt. Docs. 1939. Pp. 19. 10c.)

A technical monograph on one phase of housing prepared for the Industrial Committee of the National Resources Committee.

COYLE, D. C. *Depression pioneers*. Social prob. no. 1. (Washington: Supt. Docs. 1939. Pp. 19.)

———. *Rural youth*. Social prob. no. 2. (Washington: Supt. Docs. 1939. Pp. 35.)

DEVINE, E. T. *When social work was young*. (New York: Macmillan. 1939. Pp. 163. \$1.75.)

GEMMILL, P. F. and BLODGETT, R. H. *Current economic problems*. (New York: Harper. 1939. Pp. vii, 753. \$3.)

This volume constitutes, in part, a revision of the authors' *Contemporary Economic Problems*. Of its 26 chapters which deal with the usual material in a book on economic problems, 12 are new and 14 have been revised with the aim of bringing them up to date. Those who preconceive economic "principles" as the fundamental determinants of economic behavior, and who postulate the necessary correlate of a substantially rational human factor, will doubtless find this book as serviceable as any of its kind. On the other hand, those who view institutions along with a pattern of habitual objectives as the basic determinants

of that behavior, during a given period of time, will find, I think, that this statement will not materially assist them in characterizing the deep-seated nature of what are called economic problems.

When the point of view of the authors is proceeded from—namely, that the economic system "tends to operate" according to principles, which, apparently, are conceived as immutable and unerring—the exposition of economic problems which follows necessarily minimizes their gravity. For from this point of view economic institutions—whose development gives rise to problems—cannot but be conceived as mere excrescences in the course of economic life; in that the substantial content of that life consists of the working out of beneficent principles, there is little place left for the rôle of the institutions. Thus the so-called problems, taken as resulting from institutional change, come to be viewed as somewhat ephemeral and readily soluble. As the authors write, "As for economic institutions, there is every reason to believe that they can be and will be changed, whenever society deems a change desirable and takes the trouble to bring it about" (p. 10).

There are those, on the other hand, who do not "know" of immutable and unerring principles at work. To these students, mutable and possibly "erring" institutions—using the term to include all elements of economic nurture—are the sole connecting link between our biological selves and the physical environment. They are basal matters of habit intrinsic to the individual or group which acts under their guidance. They go to make up, together with the biological organism and the physical environment the totality of the economic life process. Problems which appear to develop as institutions change are, from this point of view, matters of profundity and of a nature that defy definitive diagnosis and prescription. What these students look for in a book on problems is an exposition of their origin and nature. What they want to know, because of their point of view, is not what "we" ought to do about it all, but, being reducible to propensities and habits, what people are likely to do about it. In brief, they look for an explanation of how and in what way human beings get themselves into institutional "log-jams" and how and in what way they re-adapt themselves to their environment when, and if, they do. This book will not appeal, I think, to those of this latter-day point of view.

GUSTAVUS TUCKERMAN

GRACE, A. G. and MOE, G. A. *State aid and school costs*. (New York: McGraw-Hill. 1939. Pp. 415. \$3.50.)

HALL, G. C. *The egregious gentile called to account*. (New York: League for Industrial Democracy. 1939. Pp. 27-40. 15c.)

VON HAYEK, F. A. *Freedom and the economic system*. Public Policy pamph. no. 29. (Chicago: Univ. of Chicago Press. 1939. Pp. iv, 38. 25c.)

HOLLIS, E. V. *Philanthropic foundations and higher education*. (New York: Columbia Univ. Press. 1938. Pp. x, 365. \$3.50.)

"The specific purpose of this volume is to describe and interpret the foundation of one of the forces that have stimulated the development of American higher education during the twentieth century. In the broad outlines of an historical survey it attempts to answer the question: To what extent and in what direction has higher education in the United States been influenced by (1) the educational and social philosophy of the foundations,

(2) their administrative organization and procedure, (3) their research and diffusion activities, and (4) their financial resources?"

KAMIAT, A. H. *Social forces in personality stunting*. (Cambridge: Sci-Art Pubs. 1939. Pp. 256. \$2.50.)

KENNEDY, A. and VAUGHN, C. *Consumer economics*. (Peoria, Ill.: Manual Arts Press. 1939. Pp. 360. \$1.92.)

KURTZ, R. H., editor. *Social work year book, 1939: a description of organized activities in social work and in related fields*. 5th issue. (New York: Russell Sage Found. 1939. Pp. 730. \$3.50.)

The fourth issue in this series was noted in the *Review* for September, 1937, page 618.

Besides a reorganization of material, this volume contains a new part, "Public assistance in the states," covering old-age assistance, dependent children, unemployment relief and public welfare. Two new articles have been added, "Administration of social agencies" and "Social action."

LYND, R. S. *Knowledge for what? The place of social science in American culture*. (Princeton: Princeton Univ. Press. 1939. Pp. x, 268. \$2.50.)

This book is based on the author's notable investigations of *Middletown*, and is addressed to the social scientists, mainly those in political science, law and political economy, with a background of philosophy, psychology, sociology and anthropology (13). His four years with the Social Science Research Council gave to him his two main points of emphasis, the isolation of the several social sciences from each other and their negative attitude and inefficacy in dealing with the present-day social crisis.

Considering what he found in his two prolonged investigations at "Middletown" it is not surprising that he should urge his fellow scientists to forget their "objective disinterestedness" and join in the investigation and formulation of plans fundamentally changing and improving social conditions. He even formulates a dozen "outrageous hypotheses," analogous to the "subversive" hypotheses that started with Galileo in the physical sciences, which go to the foundations of the capitalist system and the systems of education and religion that support that system.

He is concerned with the "pattern of American culture," and the two most general concepts on which he bases his argument are "culture" and "value." "Culture" is the whole of which the social sciences are parts, and "value" is the whole of what human beings are groping for by means of their "institutions."

This is what he means by "knowledge for what?" Research that will aid the practical administrators of affairs in advance of emergencies, such that they may accomplish something more effective than "blue eagles, forensic exhortations, scattered remedial legislation and laments over the shortcomings of our institutions in the face of fascism" (250).

JOHN R. COMMONS

MACHLUP, F. *Guide à travers les panacées économiques*. Traduit de l'allemand par MME. R. HADEKEL. (Paris: Lib. de Médecis. 1938. Pp. 328. 27 fr.)

MANN, G. C. *Bibliography on consumer education* (New York: Harper. 1939. Pp. ix, 286. \$4.)

This bibliography provides an annotated listing of almost 2,000 articles,

books and pamphlets dealing with the problems of consumer education or giving buying and use aids to consumers. Part 1 lists materials on consumer economics covering such subjects as the consumer movement, budgets, standards and labels, prices, advertising, coöperatives, government and the consumer, and money and credit.

Part 2 lists materials which provide information on the purchasing and use of such items as food and drink, clothing, shelter, household articles, fuel, drugs and cosmetics, automobiles, health aids, and investments.

Part 3 provides a bibliography of textbooks, and other teaching aids. Part 4 lists pertinent bibliographies and periodicals. In part 5 attention is given to the many commercial publications which combine the sales presentation with interesting and more or less objective guides to the consumer in the selection and use of items for the home or person.

A helpful index of authors and subjects is included in the appendix as well as a listing of publishers, periodicals, and commercial concerns providing aid to the consumer. Little information, however, is given concerning the availability of the items listed.

This volume, though it makes no claims of completeness, provides the most comprehensive compilation yet published of certain types of consumer education materials. Most "grass-root" consumers, however, will be surprised at the lack of reference to the works of those outspoken writers, including the staffs of Consumers' Research and Consumers Union, who have done so much in recent years to "educate" consumers to their own need of education. The author's editorial defense of his selection is a preface statement that "there is a distinct movement away from the sensational exposure type of consumer education which predominated during the early history of the movement, to the constructive phase which is now being ushered in."

GERALD A. TALLMAN

MARVIN, D. M. and WILLIAMS, G. M. *Design for recovery*. (New York: Harper. 1939. Pp. 167. \$2.)

A recognition of needed reforms, but also critical of some of the methods. A plea for "interbreeding" of "warm hearts and hard heads." Government assistance is needed for recovery, but expenditures should be for worth-while projects which will increase production.

MASPÉTIOL, R. *Economie paysanne*. (Paris: Lib. de Médecis. 1939. Pp. 190. 15 fr.)

MONROE, D., and others. *Family income and expenditures, Pacific region*. Part 1. *Family income*. U. S. Dept. of Agric. misc. pub. no. 339. (Washington: Supt. Docs. 1939. Pp. 384. 35c.)

ODUM, H. W. *American social problems: an introduction to the study of the people and their dilemmas*. (New York: Holt. 1939. Pp. 556. \$3.)

PAUSTIAN, P. W. and OPPENHEIMER, J. J. *Problems of modern society: an introduction to the social sciences*. (New York: McGraw-Hill. 1938. Pp. xii, 571. \$3.)

The authors act as interlocutors, the end men being specialists whose opinions, on different sides of controversial questions, are quoted. This is in a way a book of readings, the selections being interlarded with text. The text is apt to be connective, though frequently the authors give their own exposition or summary.

The subtitle explains the inclusiveness of the volume, running all the way from money and modern life to marriage and the family and on through the judiciary, law and justice to the problem of preventing war. The economist finds in the book less of his viewpoint than he believes useful for beginning students. Often the matter presented is so various as to be lacking in any unity, and confusion is the result. The book is a manufactured one, made too much with pastepot and scissors and too little with the pen. It has been revised several times, and a number of people have had a hand in its assembly. The reviewer wonders whether it is not better to strain an amount of information through the intelligence of one or two students and have them report their conclusions. A book of the present sort cannot be clear. It is clamorous. Still, the authors, while professing neutrality, are liberal in their own slant, and have an enlightened attitude toward the materials used and the topics presented. This is in itself a significant fact in the history of the making of textbooks in the social sciences. One hopes that the old type of text which began and finished with defense of the capitalist system and its institutions is discredited. Not that this volume goes far in the opposite direction, for the authors say: "Since it is too early to make out any except a theoretical case for communism, no effort will be made to list the strong features of such a system of society. If a case were to be made for communism, it would be necessary to fall back upon the long list of assumptions that support the defenders of such a system in their struggle to win an opportunity to try their schemes in practice. A revolutionary movement is not deemed successful until it has proved its worth on the page of history." This seems a little neglectful of twenty years of accomplishment in the Soviet Union, where "the page of history," so far as students of the social sciences are concerned, has received a new impress, and one of more consequence than almost any of the expedients brought forward in this book.

BROADUS MITCHELL

PERRY, C. A. *Housing for the machine age*. (New York: Russell Sage Found. 1939. Pp. 261. \$2.50.)

It happens that Mr. Perry has applied himself to the studious analysis of the social problems commonly appertaining to community neighborhoods. Even though such analysis is largely concerned with conditions in the American metropolis, as in Mr. Perry's book it is, it nevertheless must not be overlooked that the social agglomeration is a combination of custom, creed and color and that the degree of dominance of any one of these categories tends to invest the community neighborhood with its individuality, no matter whether the neighborhoods are situated in the metropolis or in a remote mill town. Therefore the analysis of any American community neighborhood by a serious and impartial observer merits equally serious attention both on the part of less experienced observers as well as on the part of those with comparable experience but with divergent views.

Mr. Perry's volume is devoted to an effort to secure the power of eminent domain for the purpose of promoting, and making possible, commercial developments of certain seldom attained characteristics, on the sanction of public benefits which they would bestow. The neighborhood unit formula which Mr. Perry presents in chapter 3 is an attempt to define the characteristics that would produce the maximum benefits.

The text of the Neighborhood Improvement act formulated and promoted by the National Association of Real Estate Boards is used as a tailpiece of Mr. Perry's study because it sounds and accents the note struck in chapter 1 of the study—the significance of the neighborhood.

A. R. HASSE

SCHIFFER, W. *L'article 16 du Pacte de la Société des Nations: son interprétation à la lumière de sa genèse.* (Paris: Marchal et Billard. 1939. Pp. 69.)

TAWNEY, R. H. *Some thoughts on the economics of public education.* L. T. Hobhouse memorial trust lectures, delivered May 12, 1938, at Bedford College, London. (New York: Oxford. 1938. Pp. 45. 75c.)

WAELDER, R. *Psychological aspects of war and peace.* Geneva stud. vol. x, no. 2. (Geneva: Geneva Research Centre. 1939. Pp. 56. 40c.)

WAITE, W. C. and CASSADY, R., JR. *The consumer and the economic order.* (New York: McGraw-Hill. 1939. Pp. x, 389. \$3.50.)

Messrs. Waite and Cassady have produced the most comprehensive book on economic institutions from the point of view of consumption which the reviewer has seen. The senior author has been teaching university courses in this field for many years, and the present volume is in part an expansion and revision of an earlier book. Other teachers of economics, particularly those giving courses in the field of consumption, will find this book a valuable aid in outlining their lectures or work for their students; but the reviewer would not recommend it as a textbook or collateral reading for college students or as a volume to be perused by the general reader.

The volume appears to be a synopsis of the literature relating to consumption which has come to the attention of the authors. It includes ideas regarding the nature of the economic system, the character of consumption problems, elasticity of demand, monopoly price, and other topics drawn from conventional economic theory; descriptions of the character and effect of marketing institutions drawn from business and professional journals; and discussions of such topics as the relation of income to consumers' choices, difficulties encountered by consumers in selecting goods and services and in making investments, and governmental action and other methods of protecting consumers based on research studies, monographs, and reports of governmental departments. All of this material is put together with little original thought, a conspicuous absence of insight into human psychology and culture, an inadequate appraisal of the various economic institutions discussed, and a style easy to read but dull.

A few examples may be given of the authors' lack of critical insight. They speak of the American Medical Association as a "consumer-protective organization" and imply that it is operated primarily for this purpose. They cite an American cigarette manufacturer in Mexico who induced his workers to reduce absenteeism and to adopt a "higher" scale of living by giving the girls silk stockings—without questioning whether, in a hot climate, the substitution of silk stockings for sunshine and leisure is an advance or a retrogression in living standards. In sections headed "critical evaluation of the marketing system" and "critical evaluation of consumers' coöperation" they obviously attempt to be accurate and fair. Yet their remarks are trite and they offer few constructive suggestions.

Throughout the book the authors lean far too heavily upon the benefits of

competition and seem to be unaware of the inevitable subordination of human interests to the profits of a few in our present productive and marketing system, dominated as it is by a comparatively small group of corporation stockholders and officials. Nowhere in the book is mention made of the necessity of modifying the nature of existing industrial oligarchies and of providing, by some democratic process, for corporate directorates which are responsible to consumers if the economic order is to become the true servant of consumers.

CLARK WARBURTON

WEBSTER, E. C. *Guidance for the high school pupil: a study of Quebec secondary schools.* (Montreal: McGill Univ. 1939. Pp. xvi, 153. \$1.75.)

Managing low-rent housing: a record of current experience and practice in public housing, based on lectures and discussions at the Management Training Institute, Washington, D.C., June 13-24, 1938. Pub. no. N100. (Chicago: Nat. Assoc. of Housing Officials. 1939. Pp. 294. \$2.)

The modern social and economic order: a symposium. (Huntington, Ind.: Our Sunday Visitor Press. 1939. Pp. 372. \$1.50.)

The path to recovery—thrift or spending? Found. of democracy no. 12. (New York: Columbia Univ. Press. 1939. Pp. 23. 10c.)

Proceedings of the National Conference of Social Work at the sixty-fifth annual session held in Seattle, Washington, June 26—July 2, 1938. (Chicago: Univ. of Chicago Press. 1939. Pp. ix, 802. \$3.)

Contains 60 papers on various aspects of social work.

The struggle for economic security in democracy: a symposium arranged by the graduate faculty of political and social science of the New School for Social Research. Spec. printing of *Social Research*. (New York: New School for Social Research. 1939. Pp. 312. 75c.)

These are our lives: as told by the people and written by members of the Federal Writers' Project of the Works Progress Administration in North Carolina, Tennessee, and Georgia. (Chapel Hill: Univ. of North Carolina Press. 1939. Pp. xx, 421. \$2.)

A new method is here carried out for obtaining an accurate and highly personalized picture of the present-day life of the people in three southern states. In typical communities, interviews were distributed throughout the occupational group so as to represent a cross-section of the social and economic scale—families on relief, white and negro sharecroppers, white and negro farm laborers, farm owners and landlords, factory workers, housemaids, truck-drivers, small-town merchant, negro dentist, country doctor, justice of the peace. Instructions to interviewers furnish an outline as a guide to revealing questions, and the caution to keep their own opinions hidden in order to "let the subject's mind speak for itself."

The resulting stories portray important life happenings representative of real people in our South. We meet the farm laborer, who is not protected by wage and hour laws and is overlooked by social security; the share renter, who is a little better off in a good crop year; the landlord, who prospers if he is hard-working, intelligent, and lucky in his tenants; the justice of the peace, who must be primarily a humanitarian. Their problems of property, income, and old-age insurance have not yet been solved.

BEATRICE A. ROGERS

Insurance and Pensions

NEW BOOKS

ACKERMAN, S. B. *Insurance: a practical guide for various forms of coverage—the policy contracts and the protection afforded purchasers.* Rev. ed. (New York: Ronald. 1938. Pp. xiii, 599. \$4.50.)

The revised edition, like the first edition of Dr. Ackerman's book published more than a decade ago, approaches the subject matter of insurance from the standpoint of the buyer. All the major branches of insurance are treated except social insurance, which has been purposely omitted. The buyer approach has the advantage of treating each kind and type of insurance separately as most people do in buying insurance. From the standpoint of teaching, the reviewer is convinced that Ackerman's approach is the best for explaining the intricacies of insurance to students in an introductory course in general insurance.

Any teacher of insurance appreciates the difficulty of obtaining perfect distribution of material in a survey course. In the opinion of the reviewer the revised edition gives inadequate attention to life insurance, only one chapter (52 pages) of the thirty. Of course, one can contend with considerable force that life insurance is more complicated and requires extensive treatment of mortality tables and legal reserve problems for an adequate understanding of its principles and problems. Granted also that the other fields of insurance have much more in common, it is still true that the buyer's approach justifies a more extensive treatment of life insurance because the general student will usually consider his life policy his most important insurance. Furthermore, in most states the aggregate amount of life premiums is more than twice the combined premium volume of all other divisions of the insurance business.

The volume also has a distinctly legalistic approach to insurance. This feature is the logical result of too little emphasis upon the life branch. The set of problems which Dr. Ackerman has prepared may enable the instructor so to supplement the text that these two shortcomings may be eliminated in the actual conduct of a course.

On the whole, this volume is but an outline of insurance including many of the newer and miscellaneous forms of property and casualty coverages. This outline form with many numbered paragraphs makes an exceedingly useful text for the teacher and for the student, if the teacher elaborates where necessary. The volume is especially useful for courses in general insurance in which the instructor desires to give a rapidly moving picture of the insurance business without dipping too deeply into the details.

FRANK G. DICKINSON

_____. *Questions and problems to accompany insurance.* (New York: Ronald. 1939. Pp. 145. 75c.)

DECK, H. *Gewinn- und Verlustquellen der Lebensversicherung mit besonderer Berücksichtigung schweizerischer Verhältnisse.* (Zürich: Schulthess. 1938. Pp. xxv, 324. Fr. 8.50.)

FELDMAN, H. and SMITH, D. M. *The case for experience rating in employment compensation and a proposed method.* (New York: Industrial Relations Counsellors. 1939. Pp. viii, 66. \$1.)

"The study has four main purposes: (1) to indicate the value in unemployment compensation of providing incentives to employers to reduce certain types of irregular employment, (2) to show that some opposition to experience rating derives from misunderstanding of its implications, (3) to point out that opposition based on faults of legislative drafting should not becloud the real issues, and (4) to present an appraisal of the administrative problems in the experience-rating provisions of state laws and other proposals being considered and to suggest a simple and effective experience-rating method."

MACLEAN, J. B. *Life insurance*. 5th ed. (New York: McGraw-Hill. 1939. Pp. xii, 668. \$4.)

SHEPARD, H. B. *Forest fire insurance in the northeastern states*. U. S. Dept. of Agric. tech. bull. no. 651. (Washington: Supt. Docs. 1939. Pp. 46. 10c.)

WHITE, R. C. *Administering unemployment compensation*. (Chicago: Univ. of Chicago Press. 1939. Pp. xi, 312. \$2.)

WILSON, A. and LEVY, H. *Workmen's compensation*. Vol. I. *Social and political development*. (New York: Oxford. 1939. Pp. 349. \$3.50.)

Economical administration of health insurance benefits. (Geneva and Washington: Internat. Labour Office. 1939. Pp. 332. \$1.75.)

Pensions and you. (London: Labour Party. 1939. Pp. 111. 1d.)

Statistical tables from New York insurance report. Advance printing. (Albany: N.Y. Insurance Dept. 1939. Pp. 143.)

Pauperism, Charities, and Relief Measures

NEW BOOKS

MANGUS, A. R. *Changing aspects of rural relief*. Res. monog. xiv. (Washington: Supt. Docs. 1938. Pp. xxiii, 238.)

TITMUS, R. M. *Poverty and population: a factual study of contemporary social waste*. (New York: Macmillan. 1939. Pp. 348. \$3.50.)

Unemployment and relief—federal or local responsibility? Found. of democracy no. 7. (New York: Columbia Univ. Press. 1939. Pp. 23. 10c.)

Socialism and Coöperative Enterprises

Consumers' Co-operation in Great Britain: An Examination of the British Co-operative Movement. By A. M. CARR-SAUNDERS, P. SARGANT FLORENCE, ROBERT PEERS, and Others. (New York and London: Harper. 1938. Pp. 556. \$4.00.)

This comprehensive examination of the British coöperative movement grew out of a desire on the part of members of the Association of Tutors in Adult Education for a thorough and impartial survey which would provide adequate material for lecturing to their students. The reviewer is reminded of the origins of Henry Clay's *Economics for the General Reader*, particularly since both books may be considered classics in their fields. The present volume was in itself a coöperative undertaking, for the general

responsibility for the study was undertaken by a committee of individuals associated with the universities and adult education, together with representatives of the Coöperative Union and the Wholesale Societies. The Coöperators provided facilities for the committee to visit the premises and examine books and accounts. In addition, a group of students, under the direction of Professor P. Sargant Florence, of the University of Birmingham, undertook special investigations on subjects ranging from methods and problems of management and democratic control to consumer tastes for coöperative as compared with non-coöperative products. Masses of factual material were thus accumulated from varied sources. It is a tribute to the success of Professor Peers in revising the manuscript that the final volume reads as smoothly as though it were the work of a single author.

The conclusions of the report are favorable both to the theory and practice of coöperation. "It is the only alternative scheme of economic organization actually in existence in this country, and the only attempt at general economic planning on a large scale. It has achieved its present scope and dimensions without sacrificing anything of the principles of voluntarism." The verdict echoes that of Sydney Elliott's *The English Coöperatives*, written from within the movement; but the report deals much more critically with certain weaknesses in general organization and details.

At present, capitalist organization struggles with the problem of ensuring that every increase in production should be accompanied by a corresponding distribution of the means by which it may be bought for consumption. The coöperative system approaches this objective by the distribution of dividends on purchases and has worked back from consumption to production in such a way that, theoretically, it seems to have "a continuous capacity for expansion." However, the potentialities of coöperation as a basis for a new system depend on its efficiency in achieving this expansion of trade. Can a large and democratic organization, insistent on local autonomy and necessarily somewhat slow-moving, match the aggressiveness and flexibility of private enterprise?

In this connection, the report is especially valuable in contributing an analysis of coöperative finance and investment. More than 58 per cent of the movement's financial resources is invested in non-coöperative funds, mainly in gilt-edged securities. This is far more than is necessary to maintain liquidity to meet possible withdrawal of members' shares, and argues lack of enterprise in developing new ventures. It is suggested that defects in leadership are responsible for this over-cautious conservatism. Boards of management, including the Boards of the Wholesale Societies, are often over-burdened with routine duties and have not adequate trained technical assistance. In the retail stores there is a tendency to recruit employees from the elementary schools at the age of fourteen, and little is done within the

movement to train leaders and educate them in the aims of coöperation.

On the other hand, the coöperative movement has given chances to the ordinary man and woman, as an active member of the local society, to share in responsibility for an immense trading concern. Again, is it possible to combine this local, democratic autonomy with sufficient centralization and unified direction to ensure efficiency and successful competition with capitalist enterprises organized on a national basis? At present, the movement has no unified central authority, and the report, considering this a serious defect in organization, suggests the setting-up of an elective coöperative parliament. This body should meet often enough and long enough to deal adequately with large questions of policy, and its decisions should be binding on the local societies which have helped to elect it.

In addition to defects within itself, the coöperative movement today is beset by certain external hindrances to its development. Capitalism has entered on a new restrictive phase, fostered by the devices of marketing agreements, quotas, subsidies and tariffs. Producers have invoked the aid of the state to enforce restrictions, which are now backed up by the power of the law. Coöperation can only gain by expansion both nationally and internationally, and must fight these tendencies in its own interest and also in the interest of the general body of consumers.

The report states that it "stops short of prophecy." But the authors have not hesitated to discuss obstacles in the way of future expansion and to make suggestions which deserve serious consideration from those who are interested in organizing coöperative activities. The wide scope of the report as a whole makes it equally valuable to students of the development and theory of consumers' coöperation.

GLADYS BOONE

Sweet Briar College

NEW BOOKS

- BROWDER, E. *The economics of communism: the soviet economy in its world relation.* (New York: Workers Lib. Pubs. 1939. Pp. 23. 5c.)
- PETERSEN, A. *Communist Jesuitism.* (New York: N.Y. Labor News Co. 1939. Pp. 110. 15c.)
- STALIN, J. *From socialism to communism in the Soviet Union: report on the work of the Central Committee to the Eighteenth Congress of the C.P.S.U. (B.).* (New York: Internat. Pubs. 1939. Pp. 63. 5c.)
- STRACHEY, E. J. S. L. *How socialism works.* (New York: Modern Age Books. 1939. Pp. 212. 50c.)
- STEWART, M. S. *Coöperatives in the United States—a balance sheet.* Pub. affairs pamph. no. 32. (New York: Public Affairs Committee. 1939. Pp. 32. 10c.)
- History of the Communist Party of the Soviet Union (Bolsheviks): short course.* Edited by a commission of the Central Committee of the C.P.S.U. (B.). (New York: Internat. Pubs. 1939. Pp. 376. \$2.)

Statistics and Its Methods

The National Income of Australia. By COLIN CLARK and J. G. CRAWFORD. (London and Sydney: Angus and Robertson. 1938. Pp. viii, 120. 3s. 6d.)

This important statistical work by the director of the Bureau of Industry, Queensland, and the economist to the Rural Bank of New South Wales, deals with recent changes in the national income of Australia and the significance of changes in its composition.

Building upon the pioneer calculations of Mr. J. T. Sutcliffe (*The National Dividend*, 1926) and the subsequent investigations of Dr. F. C. Benham (*The Prosperity of Australia*, 1928), the authors give their estimates involving certain refinements of the methods of measurement now in common use in Australia. They pay homage to Sutcliffe's "remarkable" work, but they hold that "over-much reliance has been placed on a method which, while applicable to a group of years preceding 1924-25, is no longer suitable without considerable modification" (p. vii).

The meat of the book is contained in the first six of its twelve brief chapters. The two methods employed by the authors, as explained in chapter 1, are the "incomes received" and "production" methods. Estimates by the first method are based upon income tax returns and on data relating to non-taxpayers' incomes. In the production method the net values are taken of primary and secondary production, as recorded by the commonwealth statistician. The next two chapters give estimates of the national incomes by the two methods; and chapter 4 discloses the closeness of the results obtained by the two methods. In chapter 5 the national income is broken down into four elements (primary and secondary production, house rents, and all other production), and then the national income is traced in chapter 6 for the 50 years since Sir Timothy Coghlan made the first calculation in 1887. There are some gaps, of course; but these are filled in by a process of interpolation so that the possibility of error is not great. Finally, the national income is reduced to real income by means of price index numbers.

The book is not limited, however, to a statement of methods and estimates. It includes such topics as national income and taxation (chapter 9), international comparisons (chapter 8), and savings and investment (chapter 10).

Two of the most interesting chapters are those on the "multiplier" (chapter 11) and on future policy (chapter 12). The former is devoted to a consideration of the formula suggested by Mr. J. M. Keynes, which the authors find "not convenient" in its present form under the "very different conditions of Australian economic structure" (p. 92). In the final chapter on future policy the authors sound a prophetic warning of a fall

in export income for 1938, which "may nearly wreck the whole economic structure" (p. 105). As counter-proposals in the public interest, even though they be anathema to many in "key positions" in the Australian economy, they suggest the familiar palliatives of public works expenditure, low interest rates, and credit expansion (p. 111).

The book is a significant contribution to the estimates of the national income of a country that, up to 1890, gives a picture of rapid growth that perhaps has no parallel. For the decade beginning in 1925 Australia occupied sixth place in the world (*Weltwirtschaftliches Archiv*, January, 1938). The United States has heretofore held first place, but rough estimates of the authors put New Zealand at the top of the list at \$1,700 per head, the United States second at \$1,437, Canada close to the United States, Great Britain at \$1,277, and Australia fifth at \$1,177 (pp. 79-80). While freely admitting that "shrewd conjecture" is still indispensable in any estimates of the Australian income, the authors believe—and perhaps not without reason—that the methods which they have used are more accurate than any yet published.

J. S. ROBINSON

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NEW BOOKS

ADAMSON, W. M. *Income in counties of Alabama, 1929 and 1935*. Multilithed ser. no. 1. (University, Ala.: Univ. of Alabama Bur. of Bus. Res. 1939. Pp. 122.)

BERNONVILLE, L. D. *Initiation à l'analyse statistique*. L'écon. pol. contemporaine, vol. xix. (Paris: Lib. Gén. de Droit et de Jurisprudence. 1939. Pp. 232. 50 fr.)

This is an elementary textbook on statistical methods intended for those whose mathematical background is not extensive. Its chapters deal with statistical series, averages, dispersion, index numbers, graphical representation, curve fitting, seasonal variation, simple correlation with a few pages on partial and multiple correlation and contingency, elementary probability, several properties of normal distributions and a few final pages on t , z and χ^2 tests.

The principal merit of the book is its clarity; its principal deficiency lies in the slender assortment of examples, all of which must be familiar to readers of French textbooks on statistics—price of wheat, rainfall, fictitious wage data, etc. Several features not often seen in American texts may be noted: many averages and measures of dispersions are neatly catalogued as special cases of $f(\bar{X}) = \Sigma f(x_i)/n$; Wald's method of analyzing seasonal variations is included with more familiar methods; and there is some material on sampling from a finite population.

H. A. FREEMAN

BRINTON, W. C. *Graphic presentation*, 1939. (New York: Brinton Assoc. 1939. Pp. 512. \$5.)

CLARK, C. *A critique of Russian statistics*. (New York: Macmillan, 1939. Pp. v, 76. \$2.60.)

KELLER, E. A. *A study of the physical assets, sometimes called wealth, of the United States, 1922-1933: a primer of economics—an essay in adult education.* (Notre Dame, Ind.: Univ. of Notre Dame. 1939. Pp. 140.)

A sub-title says this is "a primer of economics: an essay in adult education." The apparent objective was to help the man in the street to comprehend the character and extent of his material stake in the country.

There are three parts: part 1 contains 21 pages of primer-style text covering the high lights of the enterprise and the conclusions. Part 2 is a data section consisting of 2 pages of text and 22 pages of tables. Part 3, an appendix, contains a fair balance of text and tables spread over 70 odd pages. Parts 2 and 3 contain an account of everything in the country from acres to zithers.

The potency of the study, as an instrument to be used in adult education, is likely to be disappointing unless it is supplemented. Anyone needing to have material stepped down as much as has been done in part 1 could get nothing out of parts 2 and 3. Anyone who can make much out of parts 2 and 3 is either saved already or is past redemption.

E. B. DADE

MEANS, G. C., director. *Patterns of resource use. A technical report prepared by the Industrial Section, submitted by the Industrial Committee to the National Resources Committee.* Prel. ed. for technical criticism. (Washington: Supt. Docs. 1939. Pp. v, 149. 35c.)

The technical report embodies the essential results of prodigious labors expended to discover the salient characteristics of the relationship between national income and the level of employment. Advanced methods of curve fitting were applied to statistics of eighty-one separate industrial segments to get a close mathematical representation of the series prior to 1932. Functions thus determined were used to predict for the period since 1932. Industrial segments in which the calculated ordinates for the period since 1932 were close to the observed data in value were said to exhibit continuity. Persistence in the forces that form patterns in industrial segments was of primary interest since, in short-run forecasting, it will determine the reliability of the results.

There are two fundamentally different notions embodied in the report. One is the purely statistical idea that it is possible to break down a complex structure into its elements. Furthermore that persistent relationships can be used to foretell some events from the knowledge of others. The process is empirical. It is great sport. There is reason to believe that it contributes to the economist's understanding. The second idea has to do with economic synthesis. The Industrial Committee has obtained by means of empirical functions an answer to the question: How many billions of national income would accompany full employment under 1938 conditions? The answer is, roughly, 80 billions. What could be more reasonable than the notion that full employment would attend an income of 80 billions however derived? Every chemist knows that the results of quantitative and qualitative analysis do not give recipes for the synthetic production of materials. Answers to the questions associated with economic synthesis probably are not to be found in the data of times when synthesis was not being attempted. The synthesizers are playing stud poker with destiny. Sometimes they will win. Sometimes they will lose. However, if the record is kept straight, and if the patient lives, it may be possible that at some

future time economic experts will know exactly how to proceed in order that employment will be raised exactly two per cent in precisely six weeks.

E. B. DADE

NATHAN, R. R. and MARTIN, J. L. *State income payments, 1929-37*. (Washington: U. S. Dept. of Commerce, Nat. Income Sec. 1939. Pp. 22.)

SEARLES, C. K., MOORE, F. G. and THEODORIDES, A. *Seasonal fluctuations in Toledo business*. Bull. 12. (Toledo: Univ. of Toledo Bur. of Bus. Res. 1939. Pp. 15.)

TSCHUPROW, A. A. *Principles of the mathematical theory of correlation*. Translated by M. KANTOROWITSCH. (London: Hodge. 1939. Pp. x, 194. 12s. 6d.)

VINCI, F. *Manuale di statistica: introduzione allo studio quantitativo dei fatti sociali*. Vols. I and II. 2nd ed. (Bologna: Zanichelli. 1936; 1937. Pp. viii, 300; 353. L. 32; 40.)

The second edition of Vinci's textbook includes additional material on each chapter. The chapters themselves cover subjects familiar to readers of American and English texts on economic statistics but in such detail and mathematical form as might tax some American students. The deficiency of this textbook is the absence of much of modern distribution theory. But as it is still questionable as to what extent distribution theory can be properly used in time-series analysis, criticism here must be light. All in all, Vinci's is a worthy book which will compare favorably even with such a good textbook as that by Professor Mills.

H. A. FREEMAN

Balances of payments, 1937. (Geneva: League of Nations. New York: Columbia Univ. Press. 1938. Pp. 212. \$1.50.)

A new feature of this year's compendium is a list of the 57 countries whose balances of international payments have been reprinted by the League at one time or another (pp. 6-7). This volume, however, reprints figures of only 33 countries, of which 10 are laggards. The calendar year 1936 was covered by 2; 5 countries reported for the fiscal year 1936-37; 1 for 1935; and 1 for 1932-33. The United States, which formerly reported in the spring, now reports long after current interest has vanished, in the autumn; so for the American section the League had to use partial information (p. 200).

Delinquencies like these make the League's compendium a dead record. Apart from reference, the publication has limited value to such alert compilers as scrutinize the work of other compilers for ideas to improve their own work. The League fails, however, to make the volume, incidentally, a source-book of new contributions, by the world's technical workers in this field, by itemizing, estimating, classifying, presenting or interpreting.

Like its predecessors for perhaps a decade, this 1937 survey has two main parts: the last 163 pages show the latest balances of payments of the 33 countries, in alphabetical order, usually with notes on the international investment status of each. The first 37 pages are devoted to "An analysis of recent tendencies"—a sharp enough sketch of a financially anemic world after continuing lean years of deflation. That sketch does not spring mainly from balances of payments. It could be traced, perhaps improved—with scissors, paste and a file of the *London Economist*.

The world's capital market is almost determined, as all know, by two countries: the United Kingdom and the United States. Neither has even a broadly dependable balance of payments. "In the official statement of the United States, the aggregate deficit on goods, services and gold during the period 1931-1937 exceeded the net capital inflow by \$(old) 1,344 millions—this being the balance on account of errors and omissions" (p. 24). That stupendous figure seriously belittles the cumulative error in America's official figures; in dollars regardless of parity, the true cumulative error for this period is \$2,036,000,000 (p. 119). For all the official figures show, the period is virtually a Dark Age.

Existing balances of payments of the two leading countries being so fabulously untrustworthy, the League should devote most of its text to methodology. Why not a special study of discrepancies and the ways different compilers use them or gloss them over? Why not illustrate some of the ingenious report forms of presentation, as distinguished from account forms? Why not ascertain whether gold movements follow net capital movements, marginally, in even gold-producing countries? Why not a didactic presentation of maximum comparisons and presumption-of-error principles?

The official balances of payments of the United States, for thirteen years, were reconstructed by the National Industrial Conference Board. The Board's volume (by the reviewer and associates) pointed out in detail the worthlessness of the incomparable "official" figures; and it corrected, with explanations, an almost unbelievable heterogeneity of omissions and large arithmetic errors. Far from recording or describing this independent research, in an addendum to the American section, the 1937 compendium nowhere mentions it.

RAY OVID HALL

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NOTES

The next annual meeting of the AMERICAN ECONOMIC ASSOCIATION will be held in Philadelphia, December 27-29.

The following names have been added to the membership of the AMERICAN ECONOMIC ASSOCIATION since May 1:

Balcom, B. R., U. S. Steel Corp., 436 7th Ave., Pittsburgh, Pa.
Beach, E. F., 250 W. 22nd St., New York City.
Beede, K. C., 4 Cleave Dr., Falls Church, Va.
Blaisdell, P. H., 2122 P St. N.W., Washington, D.C.
Brimacombe, S. H., 2970 Sheridan Rd., Chicago, Ill.
Carpenter, O. F., National Mediation Board, Washington, D.C.
Chudnowsky, W. A., Yale University, New Haven, Conn.
Crizevsky, M., 5478 University Ave., Chicago, Ill.
Fenimore, J. B., 2043 W. Fargo Ave., Chicago, Ill.
Fishburn, J. T., 2222 Eye St. N.W., Washington, D.C.
FitzPatrick, P. J., Catholic University of America, Washington, D.C.
Galbraith, J. K., 207 Littauer Center, Cambridge, Mass.
Hellborn, L. S., Securities and Exchange Commission, Res. and Stat. Section, Washington, D.C.
Hildebrand, G. H., Jr., Princeton University, Dept. of Econ. and Social Inst., Princeton, N.J.
Hostutler, H., 304 E. Dudley Ave., Westfield, N.J.
Johnson, K. W., Doane College, Crete, Neb.
Kemp, A., 9 Tillinghast Pl., Buffalo, N.Y.
Lynd, R. S., 75 Central Park West, New York City.
MacKenzie, W. J., 403 Blackhawk St., Chicago, Ill.
Nussbaum, H., 1142 49th St., Brooklyn, N.Y.
Pagani, J., Jr., University of Santa Clara, Santa Clara, Calif.
Pohly, C., c/o Besancon, 10 bis Blvd. des Tranchees, Geneva, Switzerland.
Rosenberg, S., 321 Washington St., Hoboken, N.J.
Rosenthal, I., 50 Union Sq., New York City.
Schuller, G., New York University, Washington Square College, New York City.
Seidman, P. K., Farnsworth Bldg., Memphis, Tenn.
Shapiro, S., 1614 17th St. N.W., Washington, D.C.
Trezise, P. H., 804 Monroe, Ann Arbor, Mich.
Watson, D. S., George Washington University, Washington, D.C.
Wood, J. E., Carl Mackley House, M and Bristol Sts., Philadelphia, Pa.

Academic Vacancies and Applications for Teaching Positions

Beginning with this issue, and continuing at least through a period of experimentation, the Association will render service to members of the Association who wish to make known their availability for teaching positions in the field of economics and to administrative officers of colleges and universities who are seeking to fill vacancies in this field. The *Review* will publish in this section brief descriptions of positions and applicants.

The officers of the Association take no responsibility for making a selection among the applicants or following up the results. The Secretary's Office will afford a central point for clearing inquiries; and the *Review* will publish summary descriptions of vacancies and applications.

It is optional with those submitting such announcements to publish an address or to use a key number.

Communications should be addressed to: The Secretary, American Economic Association, Northwestern University, Evanston, Illinois.

The Proceedings of the Seventeenth Annual Conference of the Pacific Coast Economic Association, held at the University of California, December, 1938,

have been published. Among the papers presented were: "Stabilization and American Monetary Policy," by Howard S. Ellis; "Taxation for Non-Fiscal Purposes," by Elmer D. Fagan; "Price Discrimination and Its Relation to Monopoly," by Richard B. Heflebower; "A Method of Appraising the Anti-Trust Policy of the Federal Government," by Thomas Nixon Carver; "Fair Trade Legislation and Resale Price Maintenance," by Ralph Cassady; "Federal Control of the Capital Market," by Carl S. Dakan; "The Reciprocal Trade Agreements Program," by Theodore H. Boggs; "Shipping Subsidies," by Stuart Daggett; "Pacific Coast Trade and the Orient," by Eliot G. Mears; "Some Research Problems on the Industrialization of the West," by Samuel Moment; "The Economic Problems of the California Petroleum Industry," by A. H. Hand.

The sixth annual meeting of the Mid-West Economic Association was held at Des Moines, Iowa, April 20-22. The following subjects were treated in papers and discussions: price theory; public utilities; the agricultural situation; accounting and large-scale enterprise; the employer-employee relationship; economics of consumption; statistics courses in schools of business; problems in the teaching of economics; industrial concentration; statistical analyses of supply and demand; state tax problems; economics of fascism. The following officers were elected for the coming year: president, W. B. Taylor, University of Wisconsin; vice-president, J. E. Kirshman, University of Nebraska; secretary-treasurer, C. W. Thompson, University of Iowa.

Among the sixteen fellowships granted by the American-Scandinavian Foundation for study in Scandinavian countries, one was allotted to Robert William Bean of Harvard University to study economics in Norway.

Among the post-doctoral research training fellowships granted by the Social Science Research Council is one to Norman S. Buchanan, assistant professor of economics at the University of California, for study in England and Sweden in the field of monetary and cycle theory.

Grants-in-aid were given to Daniel Creamer, associate statistician, Bureau of Research and Statistics, Social Security Board, for a study of the early financial history of the Amoskeag Manufacturing Company; S. Colum Gilfillan, for a critical study of our patent and invention system and some of the proposals for its amelioration; William Haber, professor of economics at the University of Michigan, for a study of unemployment compensation and the labor market; Fritz Karl Mann, professor of political economy at the American University, for comparative studies of fiscal ideologies and institutions and their interrelations with economic and social policies; W. H. S. Stevens, assistant director of the Bureau of Statistics, Interstate Commerce Commission, for a study of capital stock and stockholders' rights; Norman J. Ware, associate professor at Wesleyan University, for a comparative study of labor relations in Great Britain and the United States; Vertrees J. Wyckoff, professor of economics at St. John's College, for a study of the economic history of Maryland during the seventeenth century; Ronald B. Shuman, assistant professor of business management at the University of Oklahoma, for a survey of petroleum economics in the United States.

An arrangement has been made between the University of Chicago and the Cowles Foundation of Colorado Springs whereby the Foundation will be moved to the University of Chicago this autumn. Professor T. O. Yntema of the Uni-

versity of Chicago becomes director of the Foundation; and Professor Oskar Lange and Mr. H. Gregg Lewis of the department of economics at the University of Chicago will devote half of their time to research for the Foundation.

The next meeting of the International Institute of Statistics has been postponed to May 10-18, 1940.

The fourth annual conference on current governmental problems at the Massachusetts State College, Amherst, will be devoted to the general topic of "Public Finance." The conference will meet November 3-4. For further information address Professor Charles J. Rohr, chairman.

The *Vanderblue Memorial Collection of Smithiana* (Baker Library, Harvard Graduate School of Business Administration, pp. 68) contains an essay by Charles J. Bullock and a catalogue of the collection presented to the Harvard Business School.

The Baker Library of the Harvard Graduate School of Business Administration has published *The Kress Library of Business and Economics Founded upon the Collection of Books Made by Herbert Somerton Foxwell, M.A., F.B.A., Late of St. John's College, Cambridge, England* (pp. 53). This contains articles on "Herbert Somerton Foxwell: A Portrait," by Audrey G. D. Foxwell; "Professor Foxwell as a Book Collector," by John Maynard Keynes; and "The Present Significance of the Earlier Literature on Economics," by Abbott Payson Usher.

Recent studies published by the Brookings Institution are *Science and Social Change*, by Professor Jesse E. Thornton and a new edition of *Government Publications and Their Use*, by L. F. Schmeckebier.

The several periodical services of the National Industrial Conference Board have been combined into a single monthly bulletin entitled *The Conference Board Economic Record*.

The Secretariat of the Institute of Pacific Relations (129 East 52nd Street, New York City) has issued a pamphlet on *The International Research Program of the I.P.R., 1939-1940 and 1936-1938*, by W. L. Holland.

Professor E. R. A. Seligman of Columbia University, one of the founders of the American Economic Association and president in 1902-1903, died July 18.

Appointments and Resignations

Albert Abrahamson, associate professor of economics at Bowdoin College, has been granted a year's leave of absence to serve as director of research for the Jewish Occupational Council of New York City. The study is expected to afford a basis for advice to Jewish communities throughout the United States in regard to vocational guidance, placement and training.

Roscoe Arant, associate professor of economics at the University of Mississippi, served as special economist for the Mississippi State Tax Commission during the summer.

George L. Bach of the University of Chicago goes to Iowa State College as an instructor in the department of economics and sociology.

Joe S. Bain of Harvard University has been appointed lecturer on economics at the University of California at Berkeley.

P. D. Beaudry of Harvard University is assistant professor of economics at Birmingham-Southern College.

Richard M. Bissell, Jr., has been promoted to the rank of assistant professor in the economics department at Yale University.

John G. Blocker has been promoted from associate professor to professor of accounting at the University of Kansas.

D. O. Bowman, instructor in economics at Purdue University, has been granted another year's leave of absence, which he will spend doing research in Washington, D.C., under a fellowship granted by the University of Michigan and Brookings Institution.

William Bray of Oberlin College is instructor in economics at Cornell University.

Emily C. Brown of the department of economics at Vassar College has been promoted to the rank of professor.

Norman S. Buchanan, assistant professor of economics at the University of California at Berkeley, will spend the coming academic year in England on a Social Science Research fellowship.

Alfred G. Buehler has resigned from his position at the University of Vermont to accept an appointment as associate professor of public finance at the University of Pennsylvania.

H. H. Burbank has resigned as chairman of the department of economics at Harvard University.

Henry A. Burd, professor of marketing at the University of Washington, is on leave for the autumn quarter to engage in research on the problem of the shifting of trade areas.

Thomas Nixon Carver will give a course at Occidental College on the factors of social evolution during the coming year.

E. H. Chamberlin has been appointed chairman of the department of economics at Harvard University.

William C. Cleveland of Indiana University taught courses in money and banking during the summer session at the College of the City of New York.

Allmond Rouse Coleman of the State Planters Bank and Trust Company of Richmond, Virginia, is appointed associate professor of accounting at Washington and Lee University.

William Edward Cox of the University of Washington gave courses in accounting during the first term of the summer quarter at the University of Virginia.

G. H. Craig of Harvard University is to be assistant professor of economics at Montana State College.

John H. Crawford has been appointed instructor in economics at Cornell University.

Marvyn Crobaugh was promoted to associate professor of economics at Washington and Lee University.

Eugene B. Daniels, assistant professor of transportation at the University of Maryland College of Commerce, has a year's leave of absence for work with the United States Tariff Commission in Washington, D.C.

Rosalie Stewart Detch has resigned her position as instructor in economics at West Virginia University.

Charles A. Ellwood of Duke University was visiting professor of sociology at the University of California at Los Angeles for the summer session, 1939.

G. Heberton Evans, Jr., associate professor of political economy in the Johns Hopkins University, has been granted a year's leave of absence to serve on the staff of the National Bureau of Economic Research.

William Fellner is lecturer in economics for the academic year 1939-1940 at the University of California, Berkeley.

Thomas W. Finney, formerly with the Bankers Trust Company of New York, is instructor in banking on the staff of the College of Business Administration at the University of Arkansas.

Allan J. Fisher has been appointed assistant professor of business administration at the College of Commerce of the University of Maryland.

John Fordon, instructor in accounting at the University of Washington, has been appointed acting instructor in accounting at the University of Iowa for the year 1939-1940.

Harold A. Freeman has been promoted from the rank of instructor to that of assistant professor of statistics at the Massachusetts Institute of Technology.

Lewis I. Froman of the University of Buffalo was visiting professor of economics and finance at the University of California summer session, 1939.

John K. Galbraith, formerly of Harvard University, has been appointed assistant professor of economics at Princeton University.

Frederick B. Garver of the University of Minnesota was awarded an honorary degree of doctor of laws at the commencement exercises of the University of Nebraska.

Paul D. Gemmill, professor of economics at Wharton School, University of Pennsylvania, was reelected chairman of the Graduate Group Committee in Economics.

Paul Geren, instructor in economics at Louisiana State University, has been given a leave of absence for the coming year.

Harry D. Gideonse, who has been for one year head of the department of economics and sociology in Barnard College, Columbia University, has resigned his position to accept the presidency of Brooklyn College, New York, beginning with the academic year 1939-1940.

J. D. Goeltz will return to the University of Tennessee as instructor in accounting after a year's leave of absence.

W. E. Grimes, head of the department of economics and sociology at Kansas State College, gave courses in agricultural economics at the University of Chicago during the spring quarter of 1939.

Allan G. Gruchy has been promoted to the rank of professor of economics in the College of Commerce of the University of Maryland.

William Haber is on leave from the University of Michigan to head the National Coördinating Committee Fund, Inc., in New York City.

W. Scott Hall has been appointed head of the department of economics and sociology at Transylvania College, Lexington, Kentucky.

Glover D. Hancock, dean of the School of Commerce of Washington and Lee University, is a member of the Committee on State Personnel Administration which is planning a personnel system for the State of Virginia.

Tom Hancock has been promoted from assistant instructor to instructor in economics at the University of Kansas.

A. G. Hart of the University of Chicago has been appointed associate professor in the department of economics and sociology at Iowa State College.

Tyler F. Haygood has been promoted from associate professor to professor of economics and made head of the department at West Virginia University.

W. Lawrence Hebbard is returning to the University of Michigan after a year of research at the Geneva Research Centre.

Ridgeway Hoegstedt has been appointed instructor in the department of economics and sociology at the New Jersey College for Women.

G. R. Holden of Harvard University is to be economist of Eastman Kodak Company in Rochester, New York.

Henry F. Holtzclaw, professor of commerce at the University of Kansas, served as regional adjudicator for the Railroad Retirement Board during the summer.

W. S. Hopkins of the department of economics at Stanford University will be on leave of absence during the academic year 1939-1940 in order to serve as a member of the staff of the Committee on Social Security of the Social Science Research Council, Washington, D.C.

Richard S. Howey, associate professor in economics at the University of Kansas, will be on leave during the academic year 1939-1940.

Harold H. Hutcheson of Princeton University has been appointed associate in political economy at Johns Hopkins University.

Chester Lloyd Jones of the University of Wisconsin taught in the Institute of Latin-American Studies at the University of Michigan during the summer session.

John E. Kane has been appointed instructor on the staff of the College of Business Administration, University of Arkansas.

Clark Kerr has been appointed acting assistant professor of economics at Stanford University for the year 1939-1940.

Lucy W. Killough, assistant professor of economics at Wellesley College, will be on leave of absence during the second semester of the academic year 1939-1940, engaged in research with respect to tax exemptions for industrial purposes.

Weston LeBarre has been appointed instructor in the department of economics and sociology at the New Jersey College for Women.

Richard A. Lester, assistant professor of labor at the University of Washington, is on leave during the autumn quarter to spend time in research on current problems of labor.

H. Gregg Lewis has been appointed an instructor in the department of economics at the University of Chicago.

William W. Lockwood, Jr., research secretary of the American Council of the Institute of Pacific Relations, taught in the Institute of Far Eastern Studies at the University of Michigan during the summer session.

D. W. Lusher of Massachusetts Institute of Technology is to be instructor of economics at Bowdoin College.

John T. Lynch, formerly of New York University, has been appointed assistant professor in the department of management of the School of Commerce of the University of Denver.

Francis McIntyre of the Cowles Commission for Research in Economics, will be on leave of absence for the academic year 1939-1940 and will serve as assistant professor of economics at Stanford University.

Alpheus Royall Marshall, associate professor of economics at the University of Maryland, gave the course in economic geography during the summer quarter at the University of Virginia. He has been concurrently acting as consultant (technical expert) with the National Bituminous Coal Commission.

Donald Martin resigned as assistant professor of economics at Washington and Lee University to join the faculty of the department of economics at the University of North Carolina.

Edgar W. Martin of the University of Chicago has been appointed instructor in the department of economics at Beloit College.

James W. Martin has returned to the University of Kentucky after completing his term of service as the Kentucky Commissioner of Revenue.

Gerald J. Matchett has been appointed instructor in the department of economics at Indiana University.

Lewis A. Maverick of the University of California at Los Angeles has returned from a year's study in England and France to resume his duties for the coming academic year.

Harvey G. Meyer of the University of Tennessee taught accounting courses at Marquette University during the summer session.

Earl J. Miller, dean of men and professor of economics at the University of California at Los Angeles, is on sabbatical leave for the academic year 1939-1940.

Broadus Mitchell, formerly associate professor of political economy in Johns Hopkins University, will be visiting professor in Occidental College, Los Angeles, for the academic year 1939-1940.

Jacob L. Mosak is an instructor in the department of economics at the University of Chicago.

Margaret Myers, assistant professor in the department of economics at Vassar College, has been promoted to the rank of associate professor.

T. L. Norton of the University of Buffalo has been appointed to the New York State Board of Mediation. He will continue his work as associate professor of economics at the University of Buffalo.

Henry M. Oliver, Jr., of Duke University is an instructor in the department of economics at Yale University.

Bernhard Ostrolenk of the College of the City of New York was a member of the economics faculty at Indiana University during the summer session.

W. V. Owen of Purdue University has been promoted to the rank of professor of economics.

Ernest F. Penrose, associate professor of economics at the University of California, Berkeley, has joined the staff of the International Labor Office in Geneva for the academic year 1939-1940.

Evald Peterson has been appointed associate in accounting at the University of Washington.

Dorothy Pickett will join the staff of the department of economics at Wellesley College, taking the classes of Mrs. Lucy W. Killough during the second semester of 1939-1940.

K. E. Poole of Harvard University is to be assistant professor of economics at Brown University.

Galen B. Price has been appointed instructor on the staff of the College of Business Administration, University of Arkansas.

E. A. Radice has resigned his post at Wesleyan University to take a position in the Financial Section of the League of Nations.

B. U. Ratchford resumes his work at Duke University after a year as visiting professor at the University of Virginia.

Charles F. Remer returns to the University of Michigan after a year as director of the Geneva Research Centre, Geneva, Switzerland.

L. G. Reynolds of Harvard University is to be associate in political economy at Johns Hopkins University.

Ross Robertson has been promoted from assistant instructor to instructor in economics at the University of Kansas.

Leo Rogin, associate professor of economics at the University of California, Berkeley, will be on sabbatical leave during the current academic year.

Julius A. Roller has resigned as associate in accounting at the University of Washington to engage in graduate study at the University of Michigan.

Emerson P. Schmidt of the University of Minnesota is assisting Mr. Jay C. Hormel of the Hormel Packing Company at Austin, Minnesota, with a research program on the stabilization of employment.

L. A. Schmidt of Marquette University was in charge of accounting courses at the University of Tennessee during the summer session.

T. W. Schultz, chairman of the department of economics and sociology at Iowa State College, taught courses in agricultural economics at the University of Chicago during the summer quarter.

William H. Shannon has been promoted to the rank of associate professor of accounting at the University of Kansas.

I. L. Sharfman, chairman of the department of economics at the University of Michigan, taught during the summer quarter at Stanford University.

Paul B. Simpson has been appointed instructor in economics at Cornell University.

John J. Smith, acting assistant professor of commerce at the University of Virginia, has accepted a position at Simpson College, Indianola, Iowa, as associate professor and head of the department of economics and business administration.

Marlyn A. Smull, instructor in economics at the University of Tennessee, spent the summer with the International Association of Milk Dealers to make a survey of the methods used in hiring and training milk salesmen.

Byron Sparks, instructor on the staff of the College of Business Administration, University of Arkansas, has accepted an appointment as accountant with the Arkansas State Public Utilities Commission.

W. Mackenzie Stevens, dean of the College of Commerce of the University of Maryland, has been concurrently serving as special consultant with the Central Statistical Board in charge of affairs concerned with the 1940 census of business.

George W. Stocking of the University of Texas has been appointed to represent the American Economic Association at the inauguration of Homer Price Rainey as president of the University of Texas, and at the preceding conferences on outstanding educational problems, December 7-9, 1939.

Marvel M. Stockwell of the University of California at Los Angeles has been granted a sabbatical leave for the second semester of 1939-1940 to study in England.

Mabel Timlin, instructor in economics at the University of Saskatchewan, is on leave during the year 1939-1940 to engage in research.

James Tinley, associate professor of agricultural economics at the University of California, Berkeley, is on sabbatical leave during 1939-1940. He will spend most of the year in South Africa studying the effects of agricultural policy on the standard of living with special reference to the native population. This study is made possible largely by a grant from the Carnegie Corporation.

Lawrence Vance has been appointed instructor in accounting at the University of Kansas.

Jacob Viner of the department of economics, University of Chicago, attended the twelfth session of the International Studies Conference, Bergen, Norway, from August 27 to September 2 as a member of the American delegation.

Frank T. de Vyver, assistant professor of economics at Duke University, gave the course in labor during the first term of the summer quarter at the University of Virginia.

W. Allen Wallis of the department of economics at Stanford University, is on leave of absence during the academic year 1939-1940, serving as research associate with the National Bureau of Economic Research.

Leonard L. Watkins of the University of Michigan taught during the summer session at Northwestern University.

S. M. Wedeberg, professor of accounting in the College of Commerce at the University of Maryland, has recently served as consultant with the Commodity Exchange Corporation in the analysis of brokerage accounts.

Frank E. Williams, professor of geography at the Wharton School, University of Pennsylvania, was elected chairman of the Social Science Division of the Graduate Faculty.

Harold F. Williamson, Jr., will be an assistant professor in the economics department at Yale University.

John A. Wolfard of the University of Wisconsin has been appointed acting instructor of labor at the University of Washington for the autumn quarter of 1939.

Holbrook Working of the Food Research Institute, Stanford University, served in May and June as a consultant for the Commodity Exchange Administration.

D. McC. Wright of Harvard University is assistant professor in the department of commerce and business administration at the University of Virginia.

H. W. Wright has been appointed acting instructor in accounting at the University of Washington.

Paul H. Wueller of the department of economics of the Pennsylvania State College has been appointed chief of the Economic Studies Division of the Bureau of Research and Statistics of the Social Security Board, Washington, D.C.

Ervin K. Zingler of De Paul University has been appointed assistant professor of economics at Louisiana State University.

THIRTY-SIXTH LIST OF DOCTORAL DISSERTATIONS IN POLITICAL ECONOMY IN PROGRESS IN AMERICAN UNI- VERSITIES AND COLLEGES

Students whose period of continuous non-residence exceeds three years are omitted from the list. The last date given is the probable date of completion.

The first list of this kind was dated January 1, 1904, and was sent to all members, but not regularly bound in the publications. The subsequent lists have appeared in the publications as follows:

A notation as to the earlier lists, extending from 1905 to 1927, may be found in the REVIEW for September, 1927, p. 574.

- Twenty-fifth list, 1928, in the REVIEW for September, 1928, p. 589.
- Twenty-sixth list, 1929, in the REVIEW for September, 1929, p. 533.
- Twenty-seventh list, 1930, in the REVIEW for September, 1930, p. 574.
- Twenty-eighth list, 1931, in the REVIEW for September, 1931, p. 582.
- Twenty-ninth list, 1932, in the REVIEW for September, 1932, p. 561.
- Thirtieth list, 1933, in the REVIEW for September, 1933, p. 560.
- Thirty-first list, 1934, in the REVIEW for September, 1934, p. 573.
- Thirty-second list, 1935, in the REVIEW for September, 1935, p. 614.
- Thirty-third list, 1936, in the REVIEW for September, 1936, p. 581.
- Thirty-fourth list, 1937, in the REVIEW for September, 1937, p. 638.
- Thirty-fifth list, 1938, in the REVIEW for September, 1938, p. 621.

The present list specifies doctoral dissertations completed and accepted by the various universities, and, in cases where a publishing company was reported, this has been given. Titles not marked "completed" are assumed to be still in preparation. It will be noted that some thesis titles in the field of sociology are omitted, inasmuch as a list is published in the *American Journal of Sociology*.

The list represents the status of the several theses on May 1, 1939.

Theory and Its History

- ADOLPH GRAUDAN ABRAMSON, A.B., West Virginia, 1929; M.A., Brown, 1936. Theory and measurement of competition and their relation to government policy. 1939. *Brown*.
- GARDNER ACKLEY, A.B., Western State Teachers, 1936; A.M., Michigan, 1937. Spatial price relations and imperfect competition. 1940. *Michigan*.
- CLAY J. ANDERSON, B.S., Missouri, 1926; A.M., 1927. The development of public works theory and policy in relation to the business cycle. 1940. *Michigan*.
- JOE S. BAIN, JR., A.B., California, 1935. The concept of depreciation in capital theory. 1939. *Harvard*.
- EARL FRANCIS BEACH, Ph.D., Harvard, 1938. The measurement of real capital. Accepted.
- RICHARD M. BISSELL, B. A., Yale, 1932. Theory of capital under static and dynamic conditions. 1939. *Yale*.
- FRANCIS MURRAY BODDY, B.B.A., Minnesota, 1930; M.A., 1936. The influence of costs on production and price policy in a joint-product industry. 1938. *Minnesota*.
- MARTIN BRONFENBRENNER, A.B., Washington, 1934. Monetary theory and general equilibrium: a study in unification. 1939. *Chicago*.
- JAMES J. A. CAREY, A.B., St. Francis, 1918. Theory of property rights in the Christian tradition. 1940. *Columbia*.
- F. LUCILE CHRISTMAN, A.B., Ohio State. The development of the doctrine of liquidity. 1940. *Ohio State*.
- WALTER ALEXANDER CHUDNOWSKY, A.B., Pennsylvania, 1934; A.B., Oxford, 1936. An empirical study of factors affecting corporate capital outlays. 1940. *Columbia*.
- SISTER MARY THOMASINE CUSACK, O.P., A.B., Rosary, 1928; A.M., Catholic, 1936. The significance in economic theory of a changing concept of property. *Catholic*.

- BERNARD WILLIAM DEMPSEY, A.B., St. Louis, 1928; A.M., 1929. Comparison of modern usury theories with Continental writers during the price revolution. *Harvard*.
- IVAN V. EMELIANOFF, Polytechnic Institute of Emperor Alexander II, Kiev; Russian Academic Group, Czechoslovakia. Economic theory of coöperation. 1939. *Columbia*.
- MAURICE A. FREEMAN, B.A., British Columbia; M.A., Ohio State. A concept of process in the work of Karl Marx, Thorstein Veblen and John R. Commons: a study in the relationship between history and cultural science. 1939. *Ohio State*.
- JOSHUA CLAPP HUBBARD, JR., Ph.D., Harvard, 1938. The theory of the process of economic development. Accepted.
- JOHN KENNETH LANGUM, B.A., Colorado College, 1933; M.A., Minnesota, 1936. The monetary framework of system analysis. 1939. *Minnesota*.
- TA-CHUNG LIU, Tanshan College of Chiaotung University, 1936. A study in railroad rate-making. 1939. *Cornell*.
- HELEN J. MELLON, A.B., Brooklyn, 1935; A.M., Columbia, 1936. Development of qualitative credit theory. 1940. *Columbia*.
- BERNARD MEYER, B.A., College of the City of New York; M.A., Columbia. The rise and decline of laissez-faire in the United States. *Fordham*.
- RAYMOND F. MIKESSELL, Ph.D., Ohio State, 1939. Marginal production and demand for labor. Accepted.
- JOHN ALGOT NORDIN, JR., B.A., Minnesota, 1935; M.A., 1937. The development of the theory of interest since 1900. 1941. *Minnesota*.
- LOUIS OLSHEVSKY, A.B., Cornell, 1931; A.M., 1932. Contributions to the theory of value. *Columbia*. Accepted.
- RALPH WEST ROBESY, A.B., Indiana, 1920; A.M., Columbia, 1923. Purchasing power: theories of Stephen A. Colwell. *Columbia*. Accepted. (Published by Prentice-Hall, Inc.)
- MICHAEL SAPIR, A.B., Yale, 1934. Economic theory and the concept of exploitation in selected writers. 1940. *Chicago*.
- CHARLES J. SHOHAN, A.B., North Carolina, 1930; A.M., 1933. Nature and significance of economics in American economic thought, 1886-1895. 1939. *Chicago*.
- PAUL B. SIMPSON, B.S., Reed, 1936. Economics of rate making under government ownership of the railroads. 1939. *Cornell*.
- EMILE BENOÎT SMULLYAN, Ph.D., Harvard, 1938. French sociological theory and its critics. Accepted.
- WILLIAM A. SPURR, A.B., Harvard, 1925; M.B.A., 1928. Seasonal variations in Japan. 1939. *Columbia*.
- GEORGE JOSEPH STIGLER, Ph.D., Chicago, 1938. Studies in the history of production and distribution theories, 1870 to 1895. *Chicago*. Accepted.
- CLAUDE LAURENCE STINNEFORD, B.S., Colby, 1926; A.M., Brown, 1927. An analysis of current wage and hour doctrines. 1939. *Chicago*.
- MERTON PHILIP STOLTZ, B.B.A., Minnesota, 1934; A.M., Brown, 1936. The econometrics of international trade. 1939. *Minnesota*.
- SIDNEY C. SUFRIN, B.A., Pennsylvania. The economic theory of wages and hours legislation. 1939. *Ohio State*.
- ROBERT ADOLPHE TRIFFIN, Ph.D., Harvard, 1939. Monopolistic competition and the theory of general equilibrium. Accepted.
- WILLIAM SPENCER VICKERY, B.S., Yale, 1935; A.M., Columbia, 1937. Behavior of marginal costs. 1940. *Columbia*.
- MICHAEL WERMEL, B.S., New York, 1931; M.S., Columbia, 1932. The development of classical wage theory. 1939. *Columbia*. Accepted. (Published by Columbia University Press.)
- HOMER W. WIDENER, B.A., M.A., Oberlin. Consumption theory and expenditure patterns. 1940. *Ohio State*.
- SAMUEL WILCOX, B.A., Richmond, 1933; M.A., Virginia, 1936. Veblen's criticisms of the Austrians and classicists. 1940. *Virginia*.
- VIRGEL G. WILHITE, B.A., Oklahoma, 1921; M.A., 1930. Some near economists of eighteenth-century America. 1940. *Wisconsin*.

NATHANIEL WOLLMAN, B.A., Pennsylvania State, 1936. The market concept in value analysis. 1939. *Princeton*.

Economic History and Geography

- AEROL ARNOLD, Ph.B., Chicago, 1931. Economic trends at the end of the sixteenth century. 1939. *Chicago*.
- WILLIAM C. BAGLEY, JR., A.B., Yale, 1930. An economic preface to the Civil War. 1940. *Columbia*.
- JOSEPH CANNON BAILEY, A.B., Illinois, 1924; A.M., Columbia, 1933. The Upper Mississippi Valley: an economic and social history of its agricultural life. 1940. *Columbia*.
- THOMAS SENIOR BERRY, Ph.D., Harvard, 1938. Wholesale commodity prices in the Ohio Valley, 1816-1860. Accepted.
- JAMES JOSEPH CARNEY, JR., A.B., Harvard, 1931; A.M., 1933. Some aspects of Spanish colonial policy. 1938. *Duke*. Accepted.
- WESLEY C. CLARK, A.B., Marietta, 1930; M.A., Pennsylvania, 1938. The effects of economic changes on a president's popularity. 1940. *Pennsylvania*.
- WILLIAM HENRY DEAN, JR., Ph.D., Harvard, 1938. The theory of the geographic location of economic activities, with special reference to historical change. Accepted.
- F. J. ERICSON, A.B., Broadview (Illinois), 1924; A.M., Chicago, 1929. Mercantilism or imperialism as a cause of the American Revolution. 1939. *Chicago*.
- MOSES I. FINKELSTEIN, A.B., Syracuse, 1927; A.M. Columbia, 1929. Economic policy of the Athenian state in the fifth and fourth centuries. 1940. *Columbia*.
- JOHN WILLIAM FLEMING, Ph.D., Harvard, 1938. Maine: studies in resources, finance, local government, and economic history. Accepted.
- WILBERT G. FRITZ, B.S., Kansas State Agricultural, 1927; M.B.S., Northwestern, 1928. Regional economic factors in the United States, 1941. *Columbia*.
- ELEANOR S. GODFREY, A.B., Smith, 1935; A.M., Chicago, 1936. Government regulation of industry in the reign of James I as illustrated by the monopolies. 1939. *Chicago*.
- ROBERT EDWARD GRAHAM, JR., B.S., Clemson, 1936; M.S., Virginia, 1937. The industrial development of the South, 1899-1937. 1940. *Virginia*.
- RALPH MURRAY HAVENS, A.B., Baker, 1927; M.B.A., Kansas, 1933. Laissez-faire in the United States during nineteenth-century depressions. 1940. *Duke*.
- MURIEL E. HIDY, B.A., British Columbia, 1927; A.M., Clark, 1928. George Peabody, merchant and financier, 1829-54. 1939. *Radcliffe*.
- C. J. HYNNING, A. B., Chicago, 1934; J.D., Kent Law School, 1934. Trends in state resources planning. 1939. *Chicago*.
- WILLERY JACKSON, A.B., Mississippi State College for Women, 1921. The repudiation of the planters' bank and the Mississippi union bank bonds. 1940. *Columbia*.
- SISTER MARIETTA JENNINGS, A.B., St. Catherine, 1919; A.M., Columbia, 1925. A pioneer merchant of Saint Louis. *Columbia*. Accepted. (Published as study no. 462 in Columbia Studies in History, Economics, and Public Law.)
- M. D. KENNEDY, A.B., Clark, 1929; A.M., 1930. A history of French slavery, 1815-48. 1939. *Chicago*.
- M. A. KUHN, A.B., Park (Missouri), 1931; A.M., Chicago, 1934. Economic factors in the development of the Republican party, 1852-1860. 1940. *Chicago*.
- SHAW LIVERMORE, A.B., Dartmouth, 1922; M.B.A., Harvard, 1924. Early speculative land companies and associations. *Columbia*. (Published by the Commonwealth Fund.)
- BERTIE MELVEL MCGEE, B.S., North Georgia Agricultural, 1926; M.S., North Carolina, 1928. The industrial development of North Georgia. 1939. *North Carolina*.
- EDGAR WINFIELD MARTIN, A.B., Washburn, 1932; A.M., Chicago, 1934. The standard of living in the United States about 1860. 1940. *Chicago*.
- MARGARET E. MARTIN, A.B., Barnard; A.M., Columbia. Merchants and trade of the Connecticut River Valley, 1750-1830. *Columbia*.
- B. G. MATTSOON, JR., A.B., Oberlin, 1922. Radicalism in the United States, 1783-1800. 1939. *Chicago*.

- HUGH SAGER MEAD, A.B., Chicago, 1900. The economic development of the Philippine Islands during the American administrations. 1940. *Chicago*.
- ALLEN W. MOGER, A.B., Randolph-Macon, 1927; A.M., Columbia, 1935. Economic and political transition in Virginia, 1885-1905. 1940. *Columbia*.
- MILDRED BUZEK OTENASEK, A.B., Notre Dame of Maryland, 1936. Financial policies of Alexander Hamilton. 1939. *Johns Hopkins*.
- KENYON EDWARD POOLE, Ph.D., Harvard, 1938. German recovery policies, 1932-1937. Accepted.
- W. R. REESE, A.B., Illinois, 1932; A.M., 1933. The tithe controversy in the Tudor-Stuart period. 1939. *Chicago*.
- ANNE T. SHEEDY, A.B., Smith, 1922; A.M., Columbia, 1923. Economic and social conditions as reflected in the works of Bartolus. 1940. *Columbia*.
- ELEANOR E. SMITH, A.B., Smith, 1935; A.M., Chicago, 1936. Sir Giles Mompesson, monopolist. 1939. *Chicago*.
- THOMAS HARVEY SMITH, B.A., Columbia, 1922; M.B.A., Harvard, 1924. A qualitative and quantitative study of recovery in Great Britain and the United States since 1929. 1939. *Wisconsin*.
- C. C. STELLE, Ph.D., Chicago, 1938. Americans and the China opium trade in the nineteenth century. Accepted.
- HUGH J. WILT, A.B., St. Vincent, 1928; A.B., Cambridge, 1934. Germany's economic and cultural interests in China, 1896-1910. 1940. *Columbia*.
- C. B. WORTHEN, B.E., Washington, 1920; A.M., 1928. History of central Montana. 1939. *Chicago*.

Agriculture, Mining, Forestry, and Fisheries

- JOHN A. BAKER, B.S., Arkansas, 1935. Theory of agricultural land income. 1940. *Wisconsin*.
- G. MAX BEAL, B.S., Utah State Agricultural; M.S., Wisconsin, 1938. Contractual relations between growers and canners in the sale of cash crops. 1940. *Wisconsin*.
- RICHARD T. BOHAN, B.B.A., Washington, 1924; M.B.A., 1925. The agrarian reform in Mexico and its effect upon agricultural production, 1910-1937. 1940. *Michigan*.
- WALTER MARION BROADFOOT, B.S., Mississippi, 1934; M.S., West Virginia, 1936. The influence of different varieties of trees on forest soils. 1940. *West Virginia*.
- RAYMOND T. BURDICK, B.S., Cornell, 1912; M.S., Colorado State College of Agriculture and Mechanic Arts, 1922. A consideration of the effect of different combinations of enterprises upon net profits from irrigated farming in northern Colorado. 1940. *Chicago*.
- JAMES PIERCE CAVIN, Ph.D., Harvard, 1938. The sugar quota system of the United States, 1933-37. Accepted.
- ROBERT MARION CLAWSON, B.S., Nevada, 1926; M.S., 1929. Economic organization of the range livestock industry of the United States. *Harvard*.
- GLENN HORACE CRAIG, B.A., Alberta, 1930; M.A., McGill, 1933. Land utilization in the arid plains of western Canada. *Harvard*.
- ROBERT J. EGGERT, B.S., Illinois, 1935; M.S., 1936. Study of cold storage lockers in Minnesota. 1940. *Minnesota*.
- SELMER A. ENGINE, B.S., Minnesota, 1931. An economic analysis of the production and utilization of roughage on southern Minnesota farms, and its effect on farm organization and earnings. 1940. *Minnesota*.
- JAMES GILBERT EVANS, A.B., Simpson, 1921; A.M., Illinois, 1924. American agricultural export policies, 1839-1939. 1940. *Chicago*.
- WALLACE T. FERRIER, Ph.D., Minnesota, 1938. A study of farm mortgage credit in the spring wheat region. Accepted.
- DENNIS ALFRED CUNLIFFE FITZGERALD, Ph.D., Harvard, 1938. Livestock under the Agricultural Adjustment act. Accepted.
- FRANK L. FLEMING, Ph.D., Minnesota, 1938. Economic aspects of soil conservation and production control in the corn belt. Accepted.

- RUDOLPH K. FROKER, B.S., Minnesota, 1925; M.A., 1927. Large-scale organization in the dairy industry. 1939. *Minnesota*.
- VARDEN FULLER, A.B., California, 1934. The supply of agricultural labor as a factor in the evolution of farm organization in California. 1939. *California*.
- JOHN LEONARD FULMER, B.S., Clemson, 1933; M.S., Cornell, 1937. An economic analysis of entrepreneurship in cotton production and the effect of shifting risk on income expectancies. 1939. *Virginia*.
- PORTER L. GADDIS, B.S., Nebraska, 1916; M.A., 1920. The principles of agricultural real estate valuation. 1940. *American*.
- WILFRED JOSEPH GARVIN, A.B., St. Francis Xavier, 1934; A.M., Catholic, 1935. Some factors affecting the production of milk and its products and their relation to the apparent consumption in Nova Scotia. *Catholic*.
- EUGENE O. GOLUB, A.B., Columbia, 1934; A.M., 1935. Agriculture and protectionism in France, 1881-1914. 1940. *Columbia*.
- JACK GOTTSEGEN, A.B., Amherst, 1923; M.B.A., Harvard, 1930. Tobacco: a study of its consumption in the United States. 1939. *Columbia*.
- PERCY LOVE GUYTON, B.S., Mississippi State, 1927; M.B.A., Northwestern, 1932. Promotion of the interests of American cotton farmers by the federal government. 1940. *Duke*.
- ORVILLE J. HALL, B.S., Arkansas, 1925; M.S., Minnesota, 1928. An economic study of rice production in Arkansas. 1940. *Minnesota*.
- THOMAS HAMILTON, M.S., Columbia, 1924. A statistical study of wool prices. *Columbia*. Accepted.
- CHARLES W. HAUCK, Ph.D., Ohio State, 1939. The relationship of price to quality and grade of fruit and vegetables. Accepted.
- GEORGE VICKERS HAYTHORNE, A.B., Alberta, 1930; A.M., 1932. Agriculture and the farm worker: an analysis of labour in farming based on a study of eastern Canada. *Harvard*.
- LOUIS F. HERRMANN, B.S., Michigan State, 1932; M.S., West Virginia, 1934. The economy of feeding dairy herds in West Virginia. 1940. *Minnesota*.
- JAMES CHRISTIAN HILL, A.B., Swarthmore, 1935. Agricultural labor as an emergent problem, with special reference to labor organization and disputes.
- JULIAN ADAIR HODGES, Ph.D., Harvard, 1938. The principle of comparative advantage applied to farm organization as found in type-of-farming areas in Kansas. Accepted.
- HAROLD F. HOLLANDS, B.S., Minnesota, 1923. An economic study of reclamation projects in central Washington, with particular reference to plans for repayment of construction costs. 1939. *Minnesota*.
- SARAH JENKINS, A.B., William Smith College, Geneva, New York, 1936; A.M., Columbia, 1937. Timber monopoly in the Pacific Northwest. 1940. *Columbia*.
- HORACE RICHARD JOSEPHSON, B.S., Pennsylvania State, 1932; M.S., California, 1933. Factors affecting costs and returns of timber production in second-growth pine stands of the Sierra Nevada foothills. 1939. *California*.
- LAWRENCE E. KINDT, B.S., Alberta, 1927; M.A., Minnesota, 1930. The sheep ranching industry in western Canada. 1940. *American*.
- ALAN C. LANYON, B.S., Johns Hopkins, 1936. Anthracite: the decline of an industry. 1940. *Johns Hopkins*.
- HENRY EARLE LARZELERE, Ph.D., Wisconsin, 1938. The Agricultural Adjustment Administration and the marketing of Wisconsin tobacco. Accepted.
- JOHN L. LILES, JR., B.S., Alabama Polytechnic, 1936; M.S., Illinois, 1937. Milk marketing in Alabama. 1941. *Wisconsin*.
- ROBERT LORENZ, Dipl. of Agric., Breslau. The essential features of Germany's agricultural policy, 1870-1936. *Columbia*. Accepted.
- DAVID L. MACFARLANE, B.S., Saskatchewan, 1933; M.S., 1934. A critical examination of the sampling methods used in government crop estimates in Canada. 1939. *Minnesota*.
- JOHN GORDON MCNEELY, B.S., South Dakota, 1933; M.S., 1934. A study of rural county zoning with special reference to Forest County, Wisconsin. 1939. *Wisconsin*.

- ROBERT MILLER MACY, Ph.D., Harvard, 1938. The measurement of the shifting of the hog processing tax under the Agricultural Adjustment act. Accepted.
- CARL H. MONSEES, A.B., Roanoke, 1922; A.M., Pennsylvania, 1925. The federal government's procedure in planning, constructing, and operating communities for resettlement purposes. 1940. *American*.
- IRA W. MOOMAW, B.S., Ohio State, 1923; M.S., 1925. Farm organization in Broach District, India. 1940. *Ohio State*.
- WILLIAM F. MUSBACH, B.S., William and Mary, 1935. A critical analysis of concepts and methods of land classification used in the United States. 1939. *Wisconsin*.
- THEODORE NORMAN, A.B., Harvard, 1930; A.M., 1932. The Federal Farm Board. 1939. *Harvard*.
- PATRICK EDWARD O'DONNELL, B.S., Massachusetts State, 1932. Analysis of the organization of the Chicago milk market, with emphasis on problems of distribution. *Harvard*.
- GLENN LAWHON PARKER, A.B., Texas, 1930; A.M., 1931. The coal industry—a study in social control. 1939. *Texas*.
- KENNETH H. PARSONS, B.A., Butler, 1928. State aids and the Wisconsin farmer. 1940. *Wisconsin*.
- CARROLL D. PHILLIPS, B.S., Colorado, 1923; M.S.A., Purdue, 1928. The organization of the wholesale fruit and vegetable market of Louisville, Kentucky. 1940. *Minnesota*.
- HENRY REGNERY, B.S., Massachusetts Institute of Technology, 1934. Land tenure. *Harvard*.
- GEORGE A. SALLEE, Ph.D., Minnesota, 1938. An economic study of agricultural labor in Minnesota. Accepted.
- E. L. SAUER, B.S. in Agric., Illinois, 1931; M.S., Agric. Econ., 1934. Some economic aspects of soil conservation in Illinois. *Illinois*.
- MARTIN E. SCHIRBER, A.B., St. John's, 1931; A.M., Catholic, 1936. The coöperative and self-help movement of Antigonish, Nova Scotia. *Harvard*.
- HENRY W. SPIEGEL, Dr. Iur. Utr., Berlin, 1933. Contemporary land tenure policies at home and abroad. 1939. *Wisconsin*. Accepted.
- JAMES M. STEPP, B.A., Berea, 1937; M.A., Virginia, 1938. Milk market control in Virginia. 1940. *Virginia*.
- THOMAS NOEL STERN, A.B., Swarthmore, 1934. Community forests in Pennsylvania. 1940. *Pennsylvania*.
- HARRY C. TRELOGAN, Ph.D., Minnesota, 1938. An economic analysis of the Chicago milk market, with special reference to the operation of United States milk license number 30 in that market. Accepted.
- PAUL W. WALLRABENSTEIN, B.S., Ohio State, 1931; M.S., 1933. The relationship of preliminary crop acreage figures to final crop acreage figures of the crop reporting service in Ohio. 1940. *Ohio State*.
- CHARLES J. WALSH, B.A., M.A., Fordham. International aspects of cotton control. *Fordham*.
- W. NEAL WATERSTREET, B. S., Northwestern, 1931; M.S., Wisconsin, 1932. Flexibility in the operation of milk plants. 1940. *Wisconsin*.
- ROBERT LYLE WEBSTER, A.B., North Dakota, 1926; M.S., Columbia, 1929. Public relations in the A.A.A. 1940. *American*.
- JOHN WILLIAM WRIGHT, B.S., Utah State Agricultural, 1917; M.S., American, 1933. Producers' markets for cotton in the United States: an economic appraisal. 1938. *American*. Accepted.
- MOHAMMED MONIR EL ZALAKI, B.S., College of Agriculture, Cairo, Egypt, 1931; B.S., California, 1934. Present and potential production and consumption of Egypt's agricultural products. 1939. *California*.

Manufacturing Industries

- JEANNETTE MARIE AMIDON, A.B., Puget Sound, 1935; A.M., 1937. The economic organization, competitive status, and relative importance of the quick-frozen foods industry. 1940. *Chicago*.

- CHARLES A. BLISS, A.B., California, 1926; A.M., 1929. The structure of manufacturing production: a cross-section view. *Columbia*. Completed. (Published by National Bureau of Economic Research.)
- PHILIP D. BRADLEY, JR., A.B., Lawrence, 1935; A.M., Harvard, 1938. Location of the paper industry. *Harvard*.
- LYLE C. BRYANT, A.B., Beloit, 1928. The gas industry of Chicago. 1940. *Chicago*.
- EILEEN M. CONLY, A.B., Brooklyn, 1934; A.M., Columbia, 1935. Changing character of the silk industry in Paterson, New Jersey. 1940. *Columbia*.
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FEDERAL TAX LEGISLATION, 1939¹

In the session of Congress that closed August 11, 1939, Congress passed four important acts dealing with tax matters: (1) the Internal Revenue code; (2) the Public Salary Tax act, 1939; (3) the Revenue act of 1939; and (4) Social Security act amendments of 1939.

Although extensive tax revision measures predicted in 1938 were not passed or even considered in the session of Congress recently closed, four important measures were enacted. In contrast to previous tax laws that were designed to raise additional revenue, the legislation of 1939 was passed primarily to improve the fundamental structure of the tax laws. The measures are significant in that they made fundamental changes in federal tax policy. The Internal Revenue code was adopted to remove inconsistencies in the various statutes, to simplify them and facilitate their use. The Public Salary Tax act of 1939 was passed for the purpose of abolishing the existing partial income-tax immunity of state government officers and employees and removing obstacles to state taxation of federal governmental compensation. The Revenue act of 1939 was adopted to extend certain excises about to expire and to revise the corporation normal income tax in view of the early discontinuance of the bitterly opposed undistributed-profits tax. It made no changes in rates and exemptions of the individual income tax. Amendments to the Social Security act reduced payroll taxes for old-age insurance and revised the plan of paying benefits.

In addition to this legislation, an important new plan of administration of the law was established. The Bureau of Internal Revenue has now decentralized the Income Tax Unit by organization of administrative districts and the setting up of administrative staffs in key cities throughout the country. In coöperation with this plan the Board of Tax Appeals also has arranged for units to hear cases in these districts. Henceforth the taxpayer will not be forced to go to Washington to adjust tax difficulties.

¹ Some matters mentioned in the present article, particularly those relating to the Public Salary Tax act and the Social Security amendments, are discussed at greater length in *The Federal Income Tax* (chapters 17 and 20), a volume by the present authors now in press.

Preceding federal revenue acts passed since the adoption of the Sixteenth (Income Tax) Amendment to the Constitution of the United States have been discussed in earlier volumes of the *American Economic Review*. Volumes and pages for reference to them are given in the *Review* of September, 1938 (vol. 28, p. 447).